



TECHNICAL REPORT M-74-5

COMPUTER-CALCULATED GEOMETRIC
CHARACTERISTICS OF MIDDLE-MISSISSIPPI
RIVER SIDE CHANNELS

VOLUME II: SIDE-CHANNEL CONTOUR MAPS

by V. E. LaGarde, S.-J. Winfrey See 1473 in back



Spendent to U. S. Army Engineer District, St. Louis Office of Environmental Resources, St. Louis, Missouri

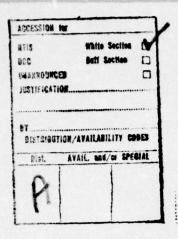
Contested by U. S. Army Engineer Waterways Experiment Station Mobility and Environmental Systems Laboratory Vickeburg, Mississippi

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED



Destroy this report when no longer needed. Do not return it to the originator.

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.





TECHNICAL REPORT M-74-5

COMPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER SIDE CHANNELS

VOLUME II: SIDE-CHANNEL CONTOUR MAPS

by

V. E. LaGarde, S. J. Winfrey



June 1974

Sponsored by U. S. Army Engineer District, St. Louis
Office of Environmental Resources, St. Louis, Missouri



Conducted by U. S. Army Engineer Waterways Experiment Station

Mobility and Environmental Systems Laboratory

Vicksburg, Mississippi

ARMY-MRC VICKSBURG MISS

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

COMPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE MISSISSIPPI RIVER SIDE CHANNELS

VOLUME II: SIDE-CHANNEL CONTOUR MAPS

- 1. Volume I of this report contains a description of the procedures followed in quantifying several parameters that characterize the geometry of Middle Mississippi River side channels. This volume contains reduced reproductions of computer-calculated and -plotted contour maps, which were produced during the preparation of data for calculation of parameter values. All maps contain 5-ft-interval contours with elevation relative to mean sea level.
- 2. Fig. II-1 is an index map showing the location of all Middle Mississippi River side channels involved in the U. S. Army Engineer District, St. Louis, study program. Table II-1 is a list of all side channels shown in fig. II-1, the river mile locations of their extremities, and the river mile locations of the stations, and is included with the index map to aid in location of the side channels. The side channels numbered 5, 7, 13, 14, 15, 24, and 25 in table II-1 were not included in this project, so no contour maps are available for them in this volume. The following is a list of all side channels for which contour maps are included in this volume by map numbers.

Map	Side Channel		
II-1	Jefferson Barracks		
II - 2	Calico		
II - 3	Osborne		
II - 4	Harlow		
II - 5	Fort Chartres		
11-6	Moro		
II - 7	Kaskaskia		
II - 8	Crains		
II - 9	Liberty		

Map	Side Channel				
II-10a	Jones, Part 1				
II-10b	Jones, Part 2				
II-lla	Picayune, Part 1				
II-11b	Picayune, Part 2				
II-11e	Picayune, Part 3				
II-11d	Picayune, Part 4				
II-12a	Cape Bend, Part 1				
II-12b	Cape Bend, Part 2				
II-13a	Sante Fe, Part 1				
II-13b	Sante Fe, Part 2				
II - 14	Billings				
II - 15	Buffalo				
II - 16	Browns				
11-17	Thompson				
11-18	Sister				

- 3. The station locations marked on each contour map are the locations where the cross-sectional area of the side channel was calculated as a function of river stage. The results of those calculations are presented in Volume I.
- 4. The locations of rock and pile dikes and the direction of water flow through the side channel are marked on each map.
- 5. The physical dimensions of several side channels necessitated breaking them into parts while processing the data, since the computer used for calculating the parameters could not contain the total data set. Those side channels broken into parts are indicated in the list above. Contour maps were produced for each part. The location of each part relative to the total side channel is indicated on insets provided on the contour map for each part.

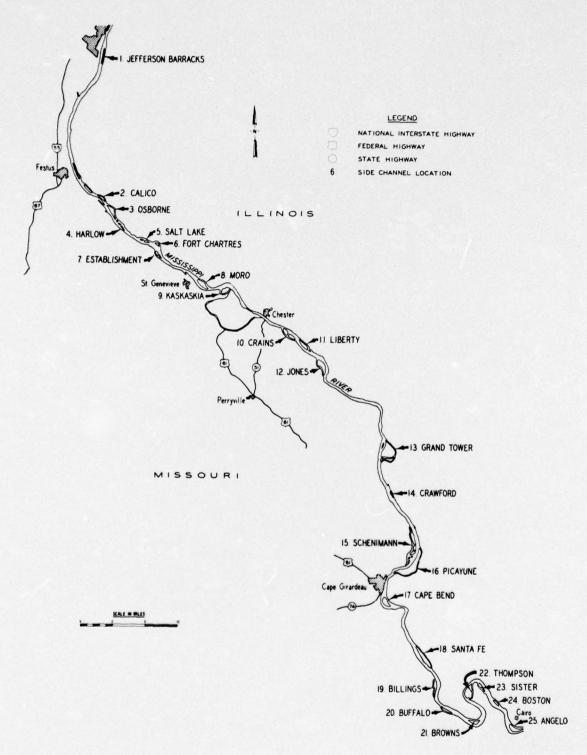
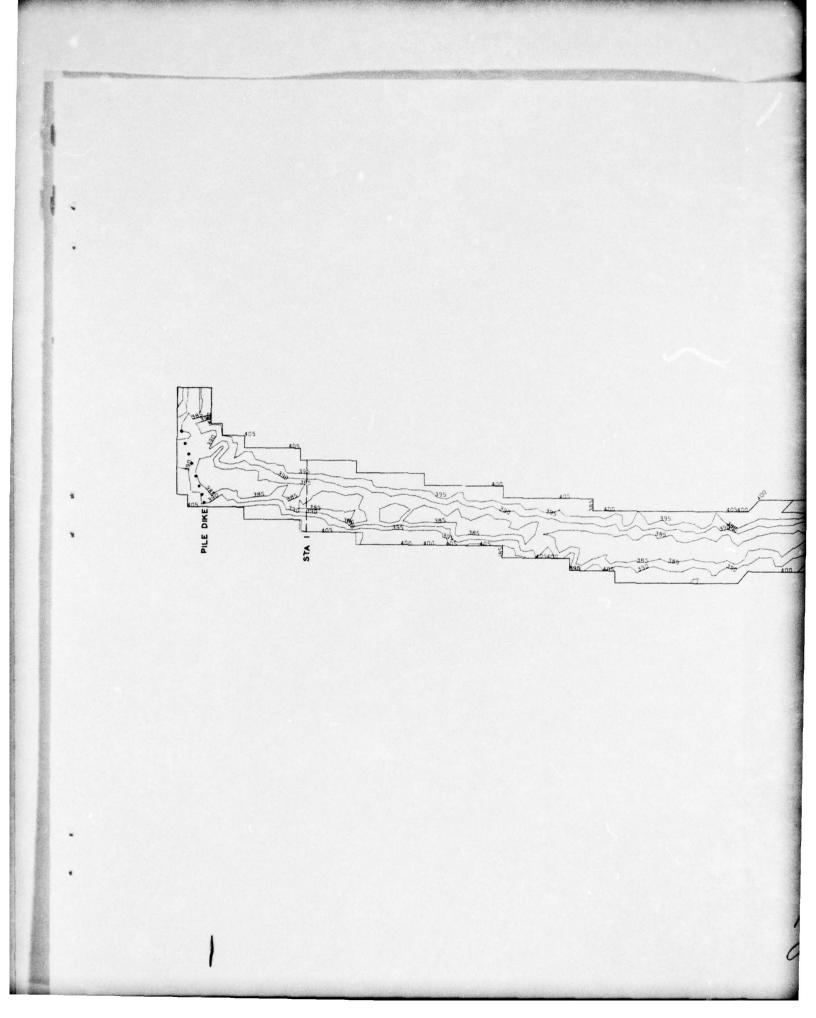


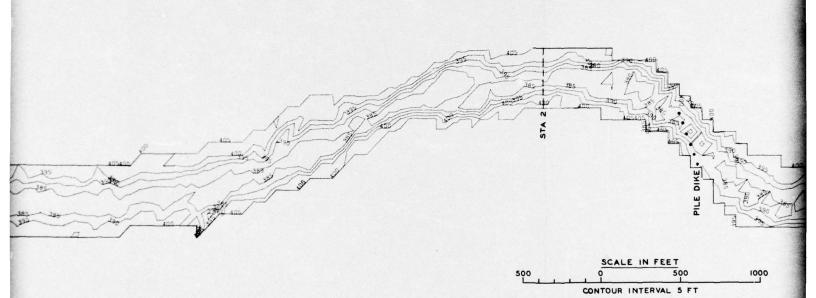
Fig. II-1. Index map of Middle Mississippi River side channels

Table II-1
Side Channel Extremity and Station Locations

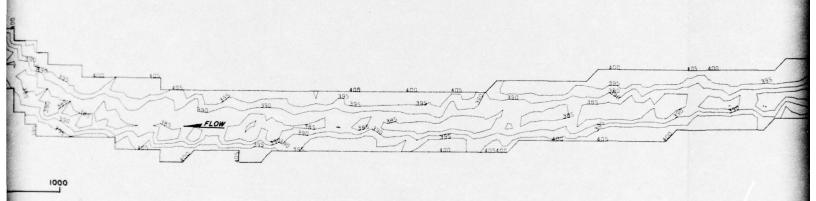
No.	Me	River Mile		Mile Station	
Name	No.	Extremes*	_1_	_2_	_3_
Jefferson Barracks	1	168.8-166.5L	166.6	167.5	168.6
Calico	2	148.3-147.4L	147.5	147.9	148.1
Osborne	3	146.3-144.3L	144.6	145.3	145.8
Harlow	4	143.0-141.7R	142.0	142.3	142.7
Salt Lake	5	141.5-136.8L	137.8	138.8	139.9
Fort Chartres	6	134.3-132.3L	132.8	133.1	134.1
Establishment	7	132.5-130.1R	130.9	131.5	132.3
Moro	8	122.6-120.11	120.0	121.7	122.3
Kaskaskia	9	118.0-115.8R	116.5	117.2	117.4
Crains	10	105.6-104.4R	104.5	105.1	105.4
Liberty	11.	102.8-99.9L	100.4	101.3	102.0
Jones	12	98.3-95.OR	95.6	96.4	98.2
Grand Tower	13	78.5-77.8R			
Crawford	14	73.7-71.6L	72.2	72.6	73.6
Schenimann	15	62.5-57.1R	57.7	59.1	61.7
Picayune	16	60.6-54.8L	54.9	58.0	60.1
Cape Bend	17	51.4-47.6L	48.0	48.8	50.7
Santa Fe	18	40.4-35.4L	35.6		37.3
Billings	19	34.0-32.7R	33.0	33.5	33.9
Buffalo	20	26.8-24.7R	25.0	25.5	26.0
Browns	21	24.7-21.7L	22.1	22.8	24.2
Thompson	22	18.7-15.3R	15.9	17.7	18.6
Sister	23	14.4-11.9R	12.5	13.0	14.0
Boston	24	10.4-7.7L	8.3	8.8	10.1
Angelo	25	5.0-1.2L	2.6	4.0	4.8

^{*} R and L indicate that the side channel is on the right or left of the river, respectively, when facing downstream.

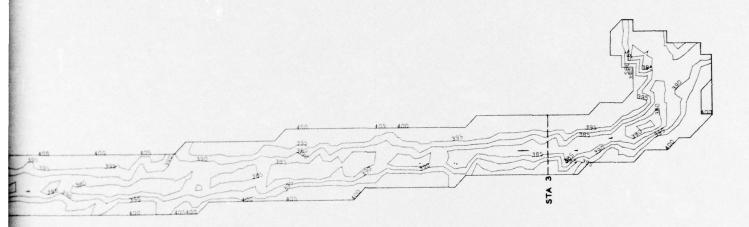




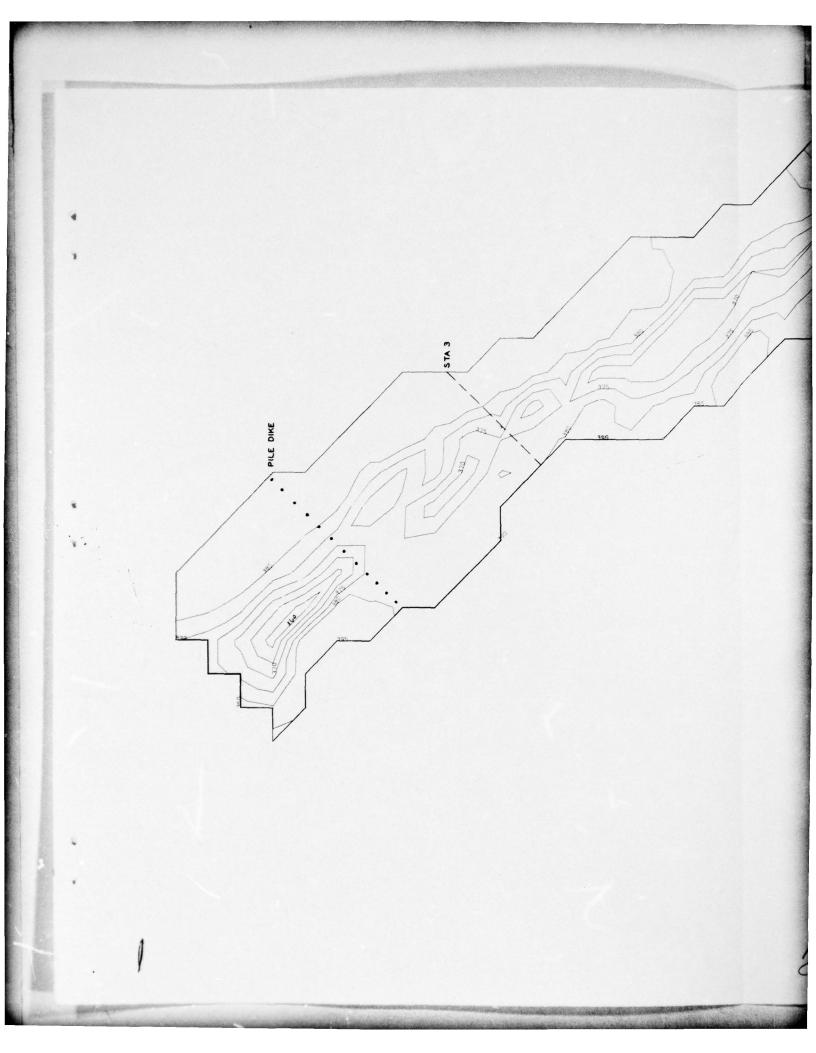
SIDE CHANNEL JEFFERSON BARRAC

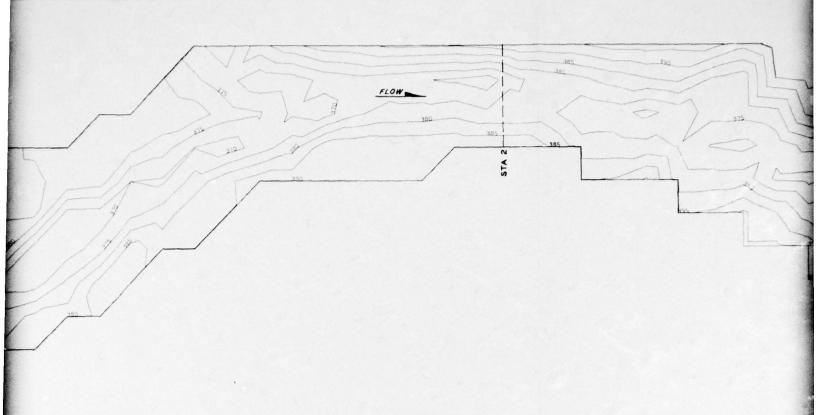


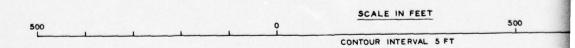
N BARRACKS



MAP Ⅱ-1

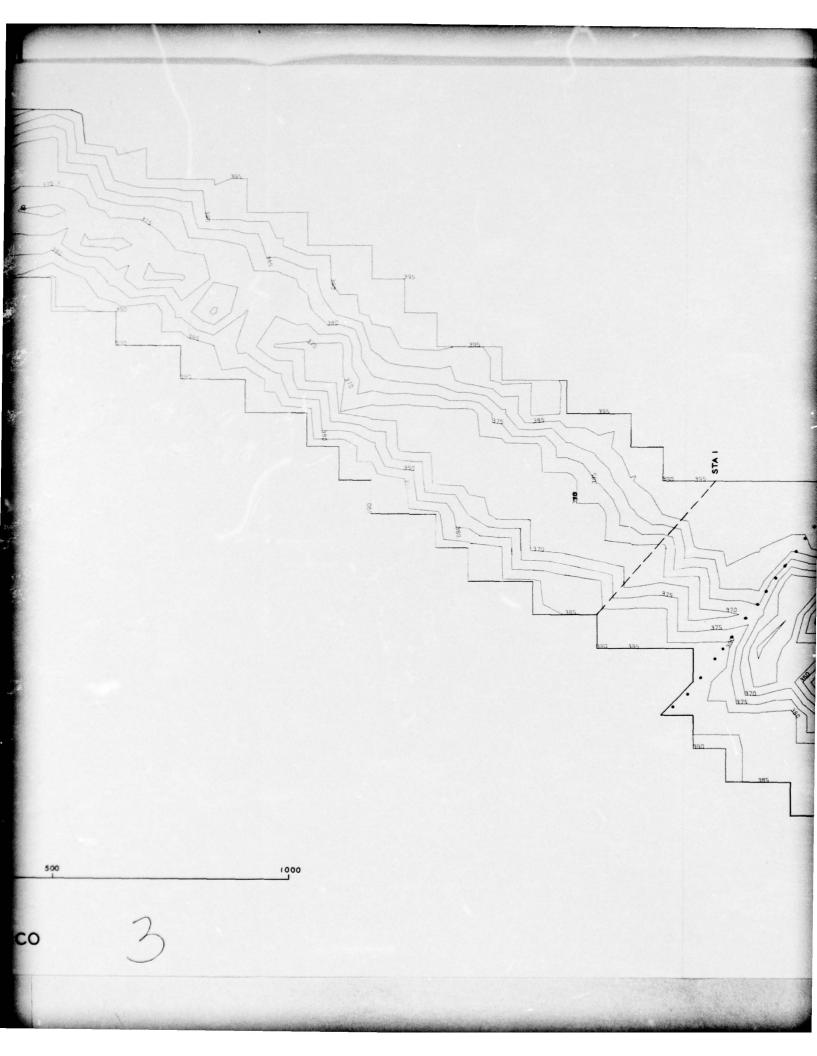


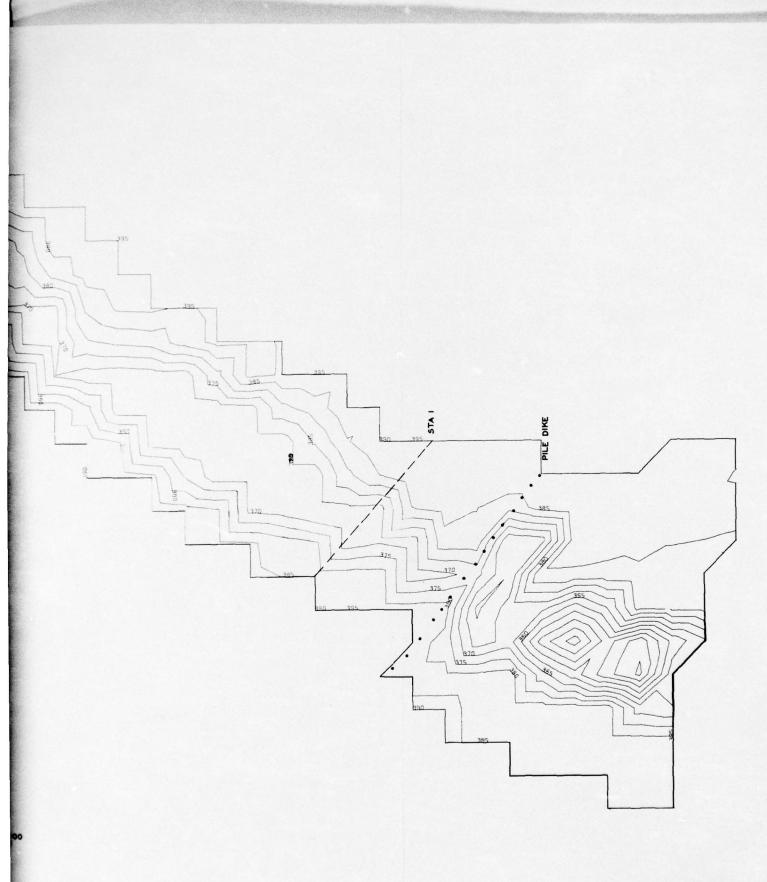


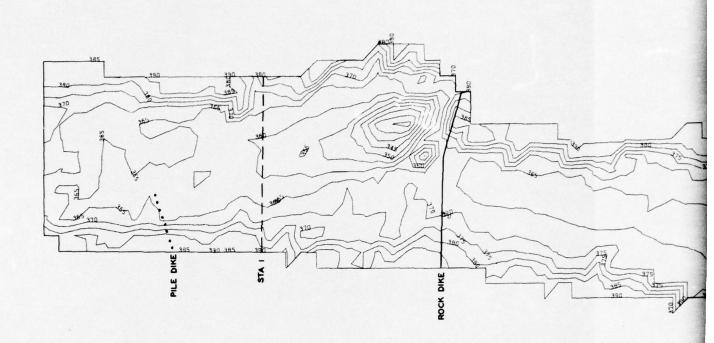


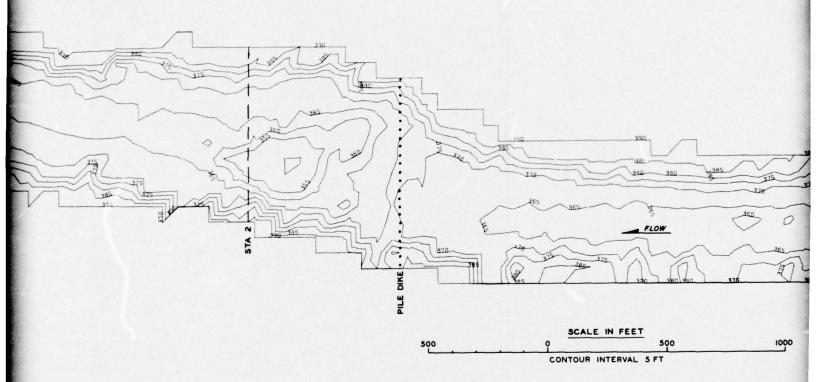
2

SIDE CHANNEL CALICO



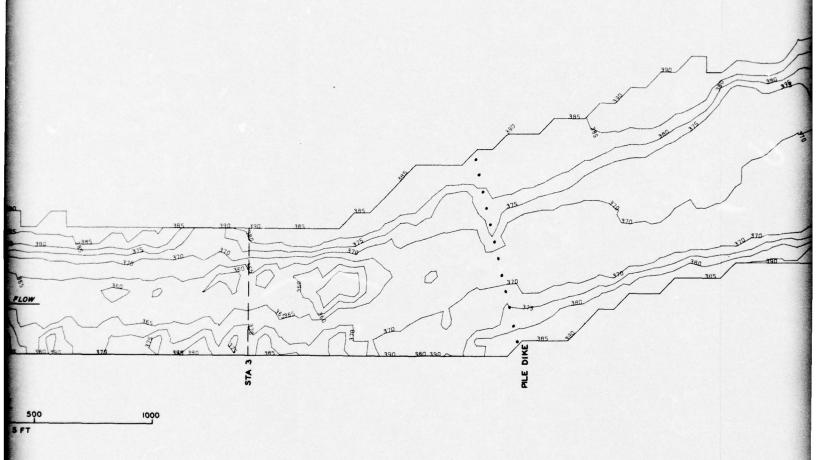




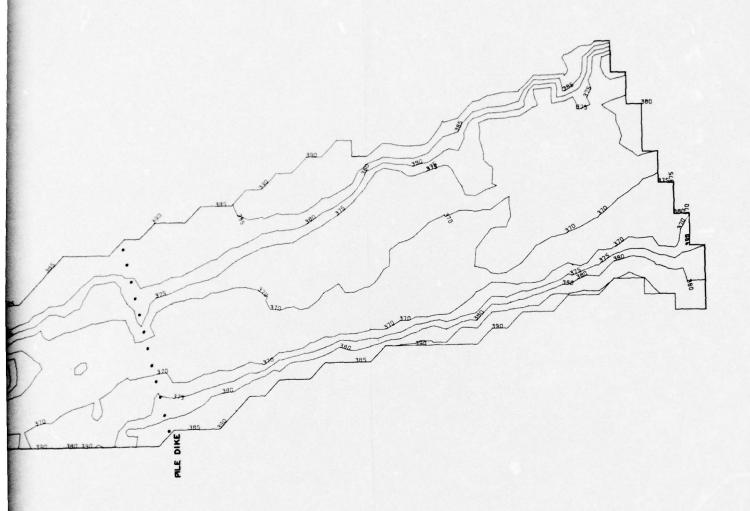


SIDE CHANNEL OSBORNE

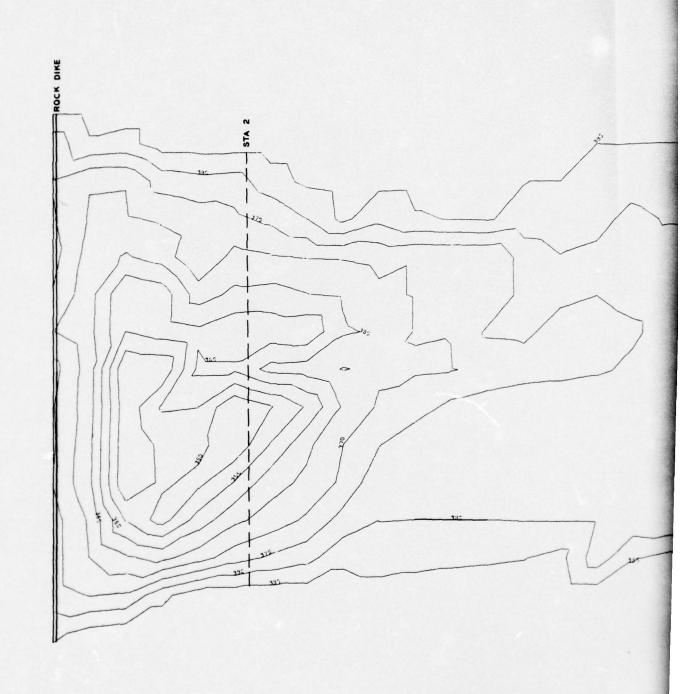


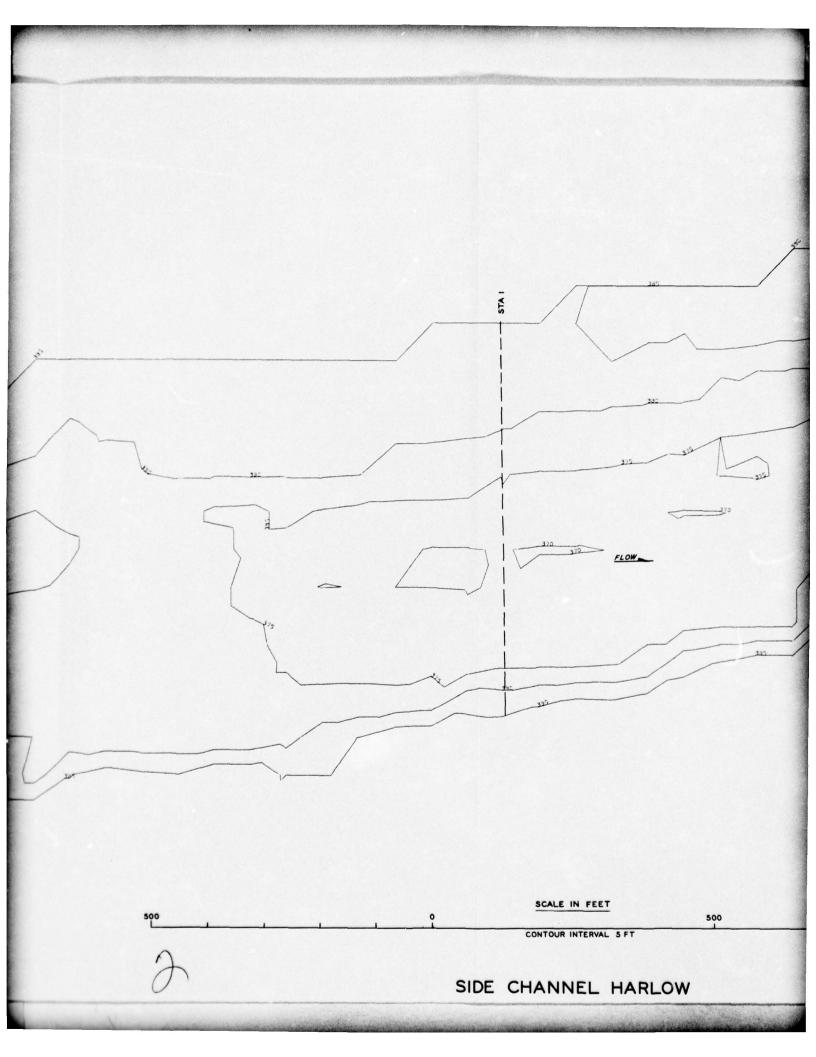


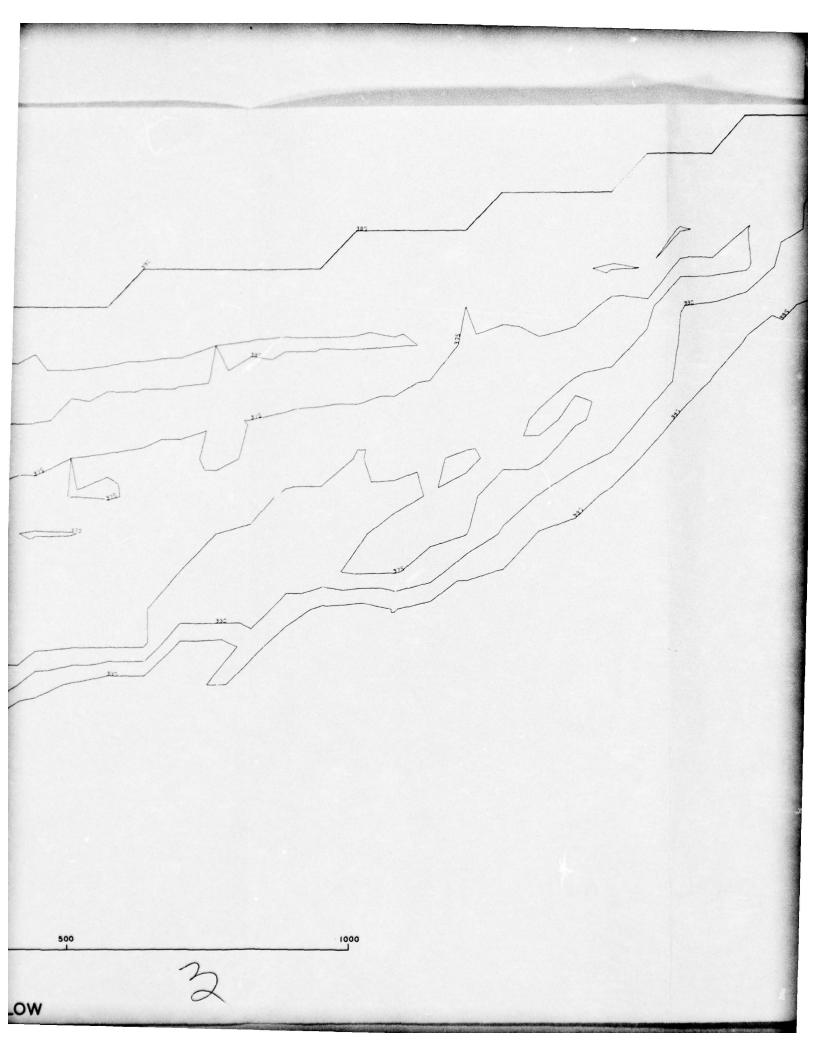
SBORNE

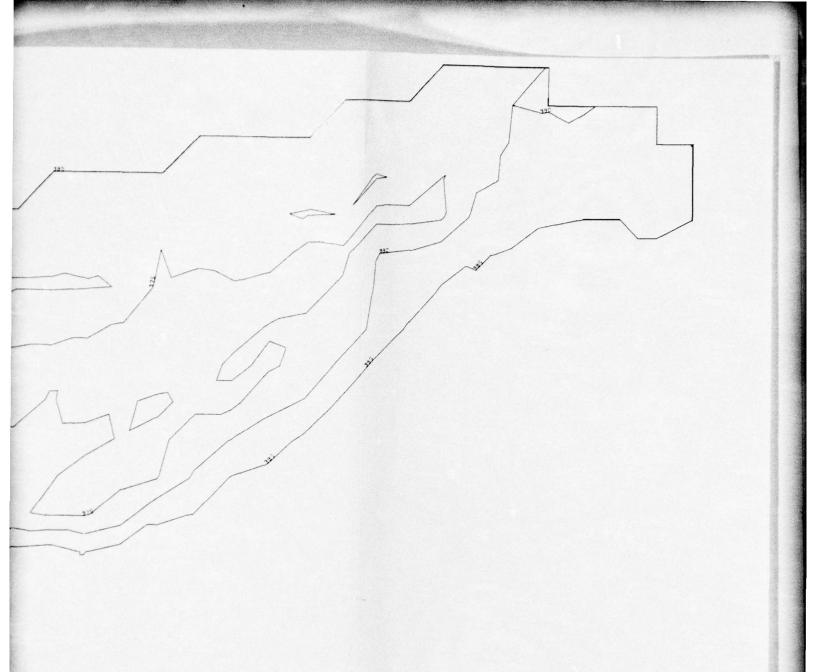


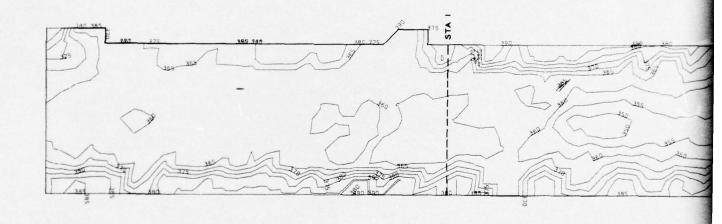
MAP Ⅱ-3

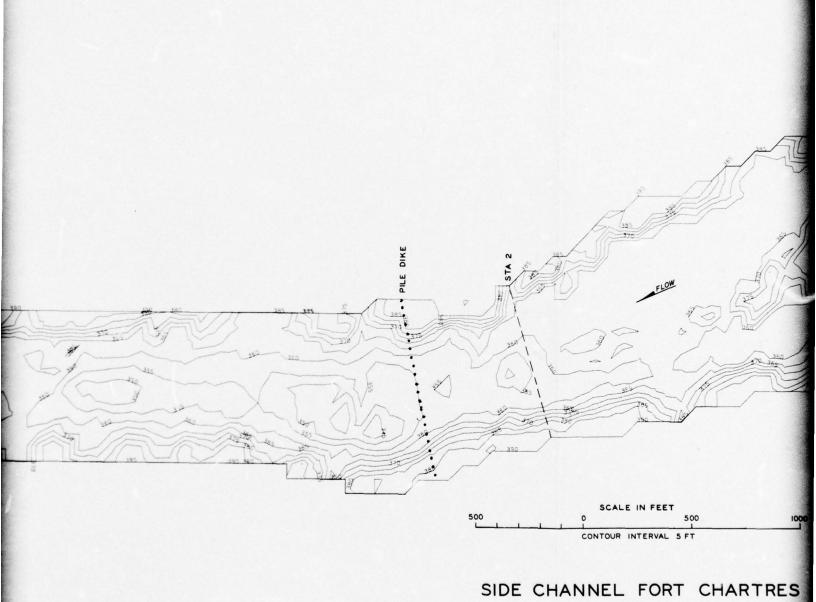


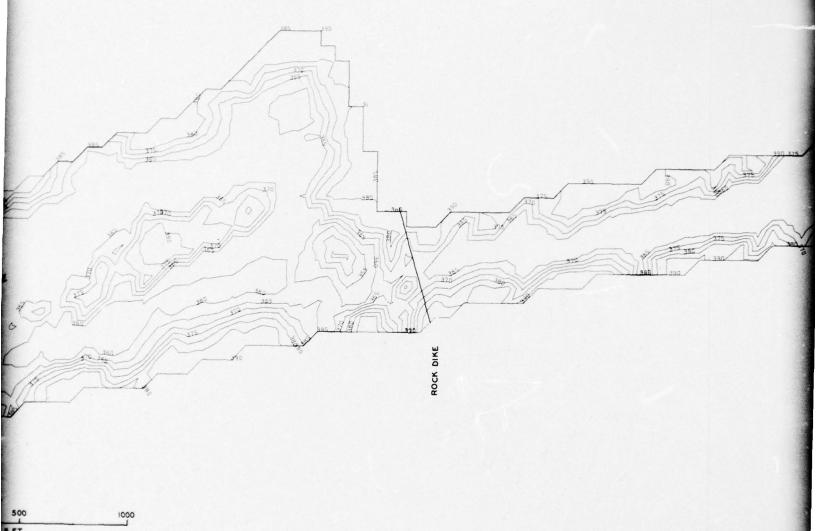




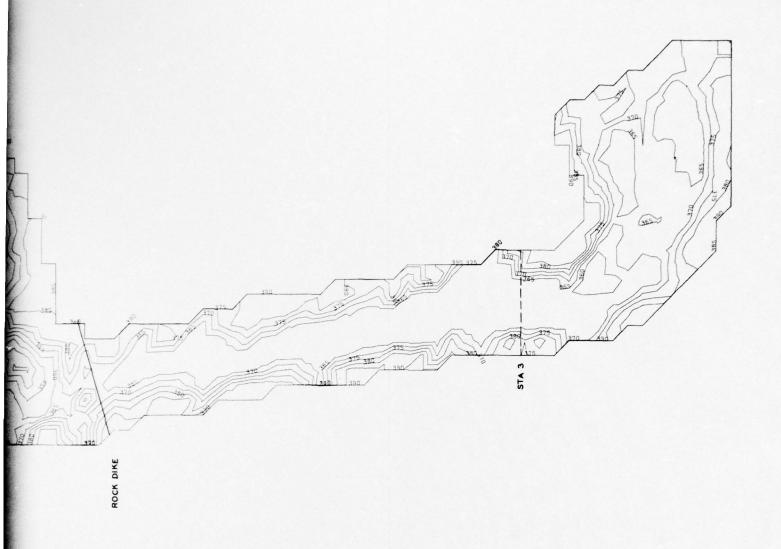






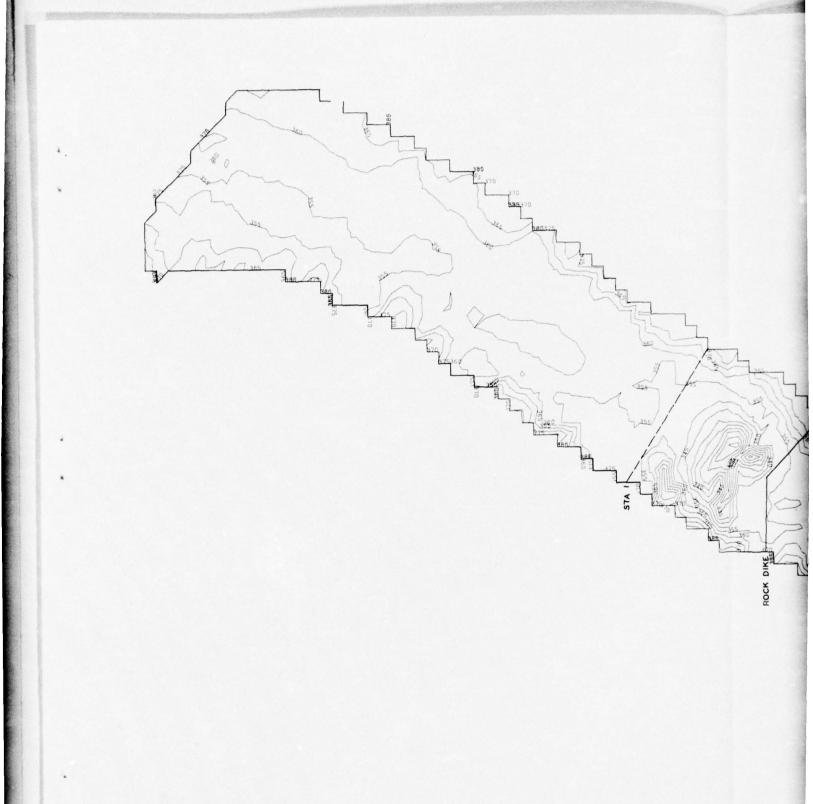


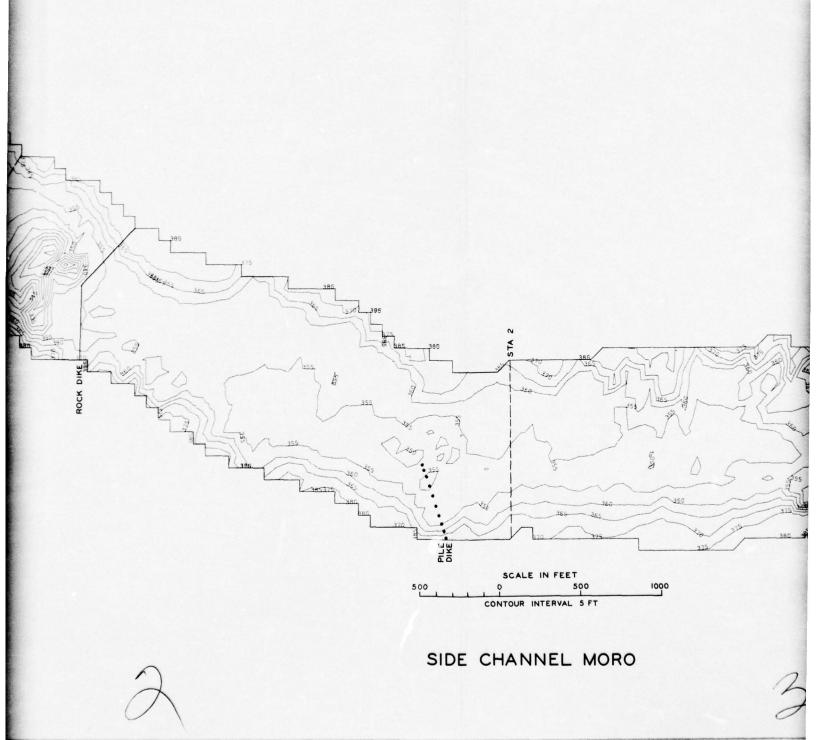
CHARTRES

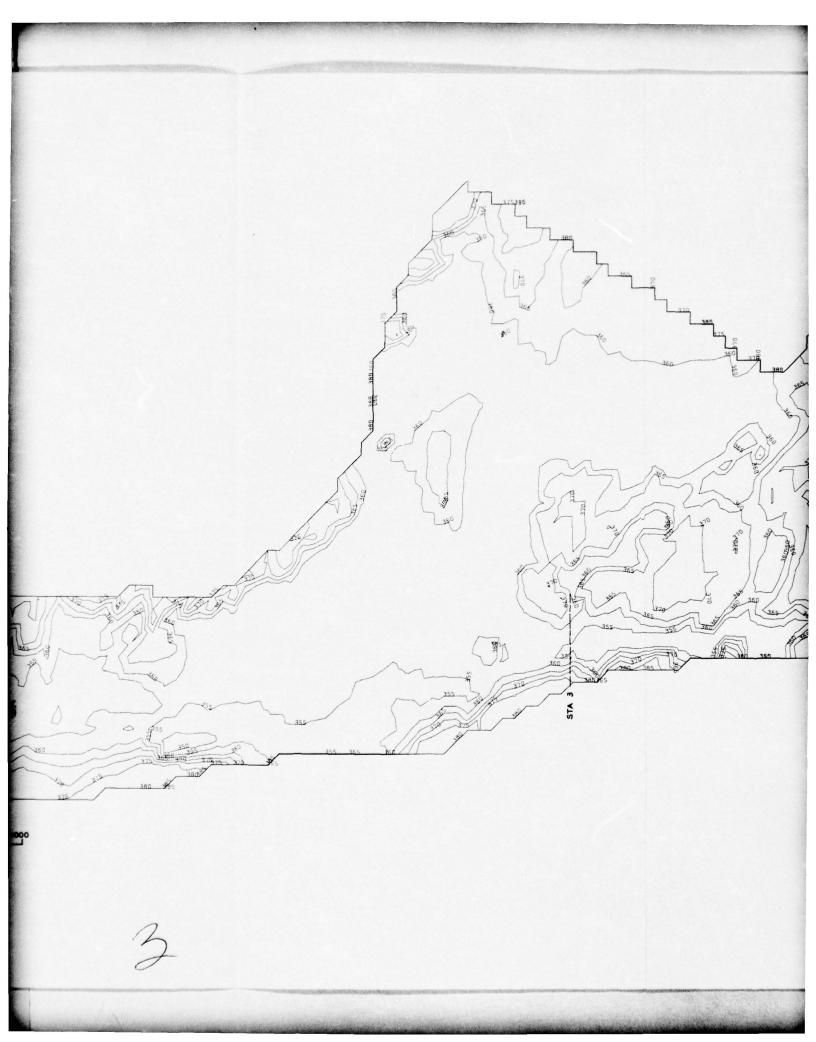


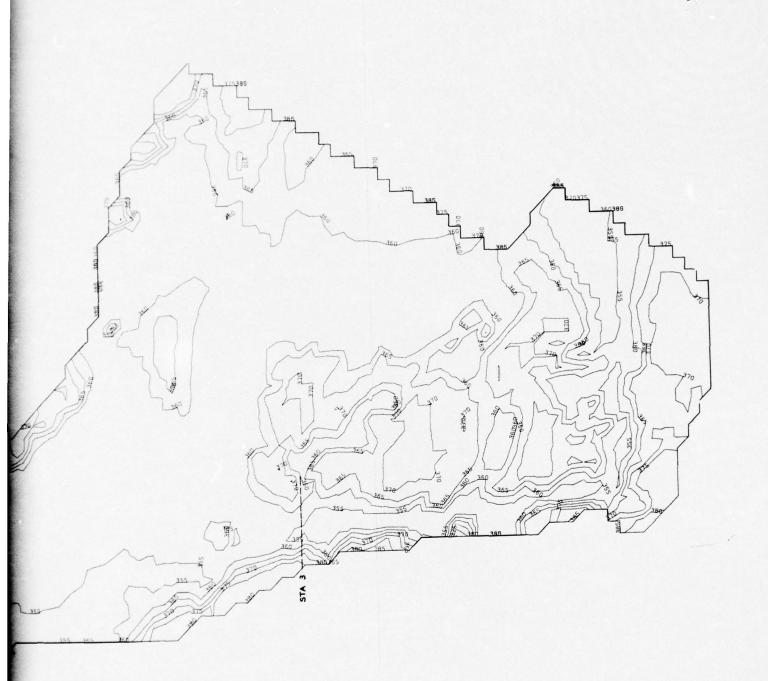
MAP Ⅱ-5



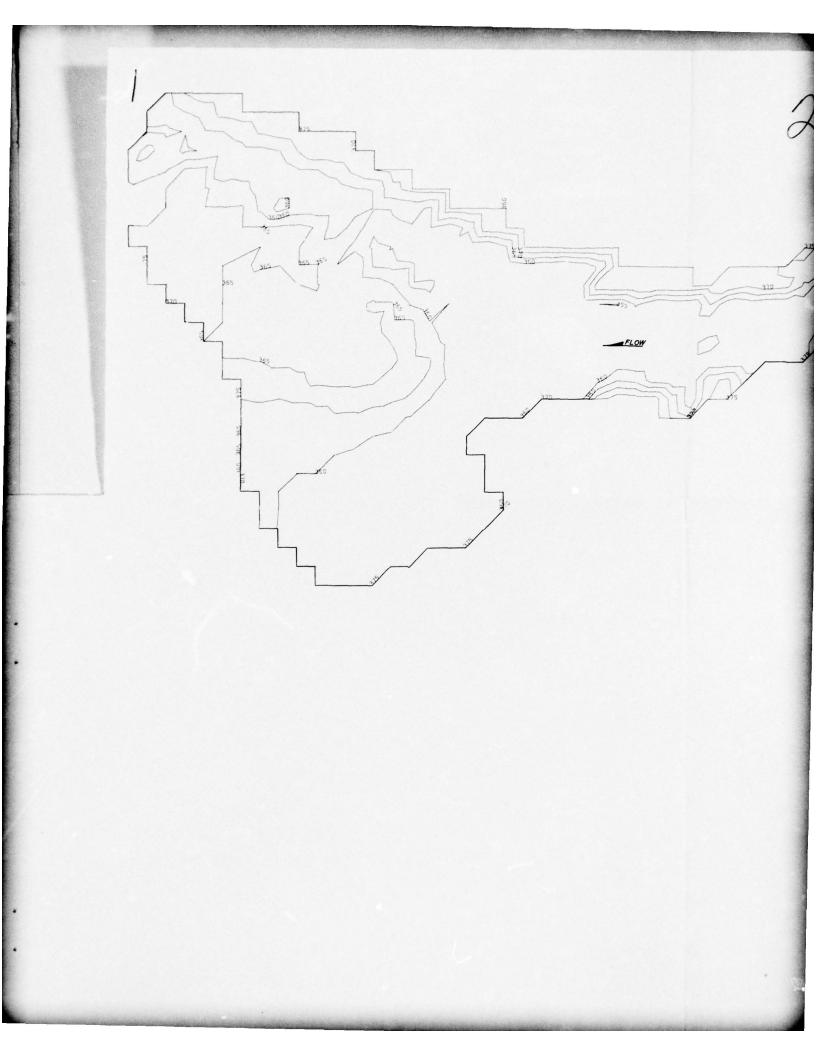


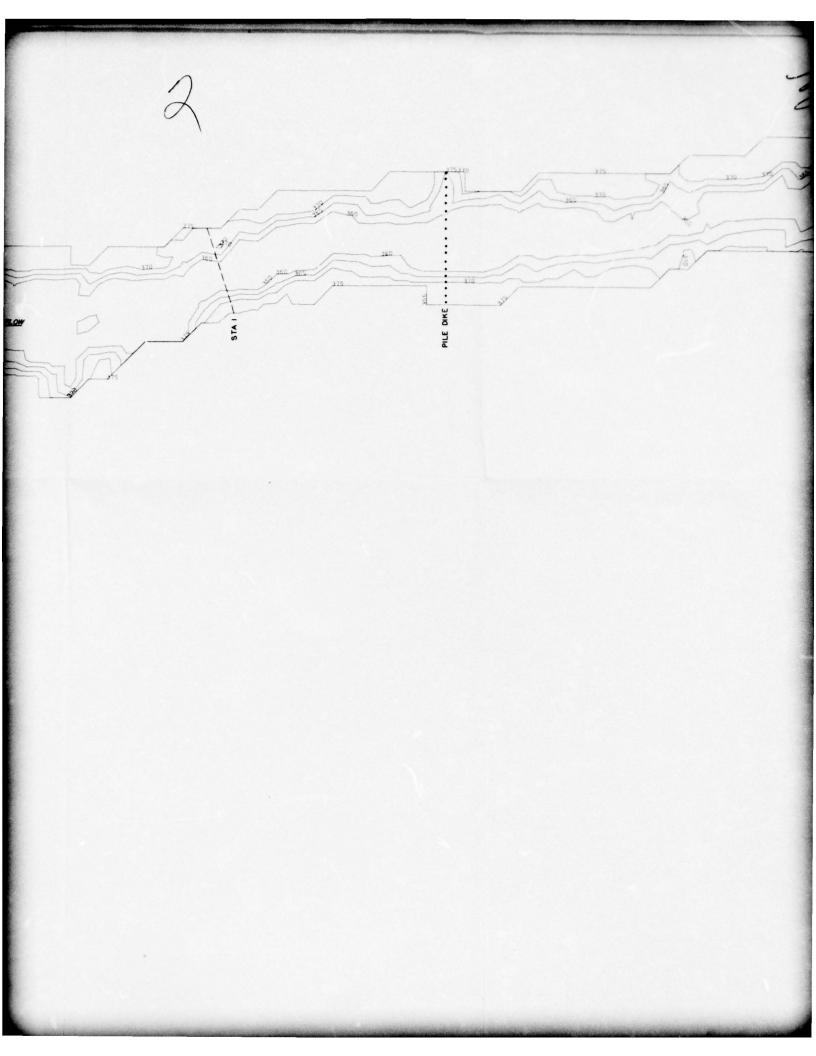




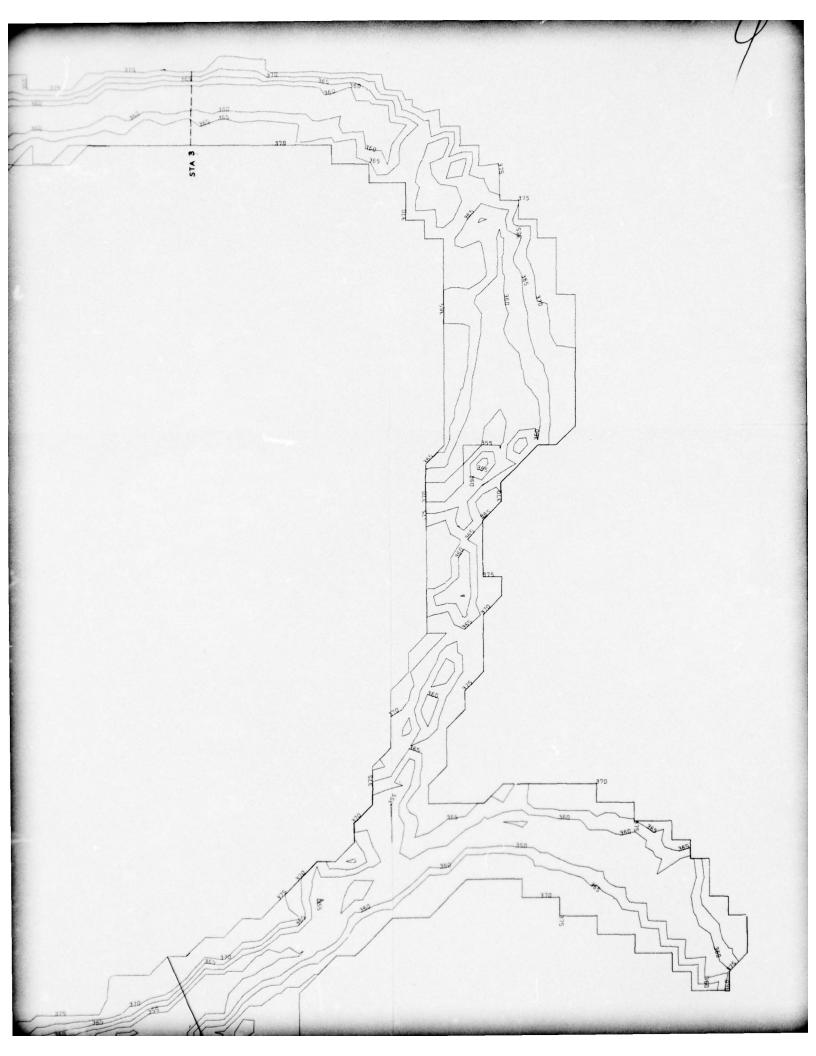


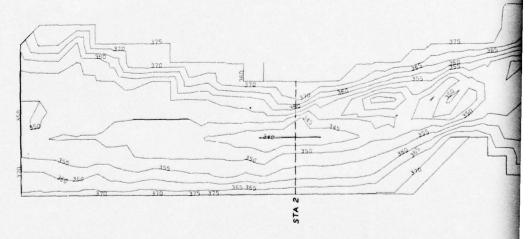
MAP II-6









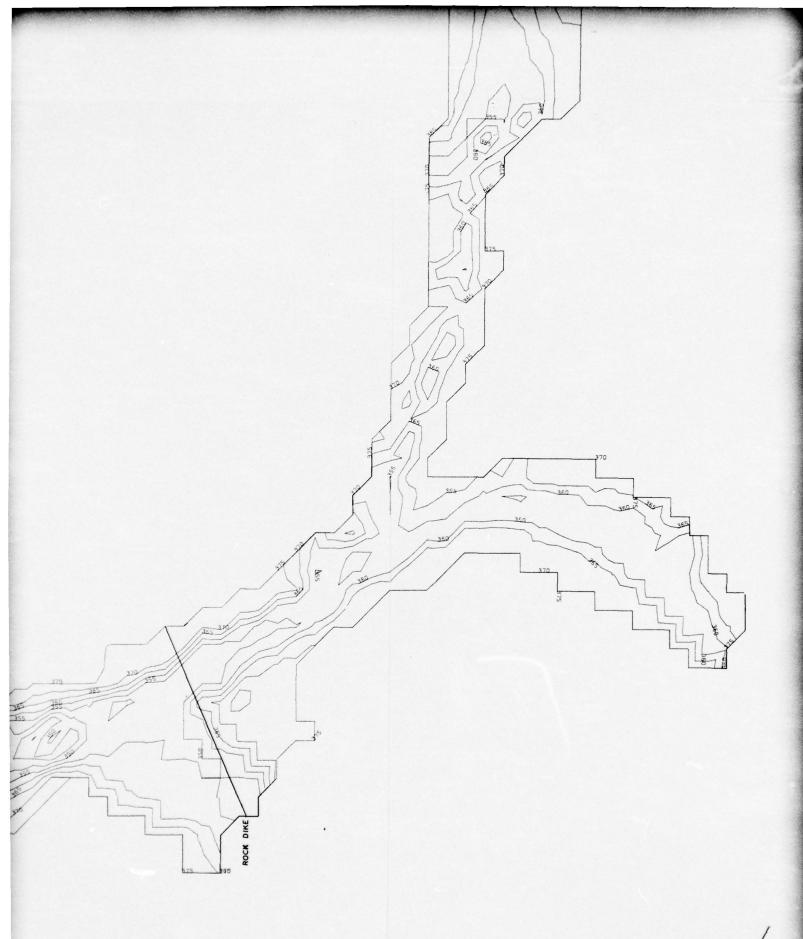


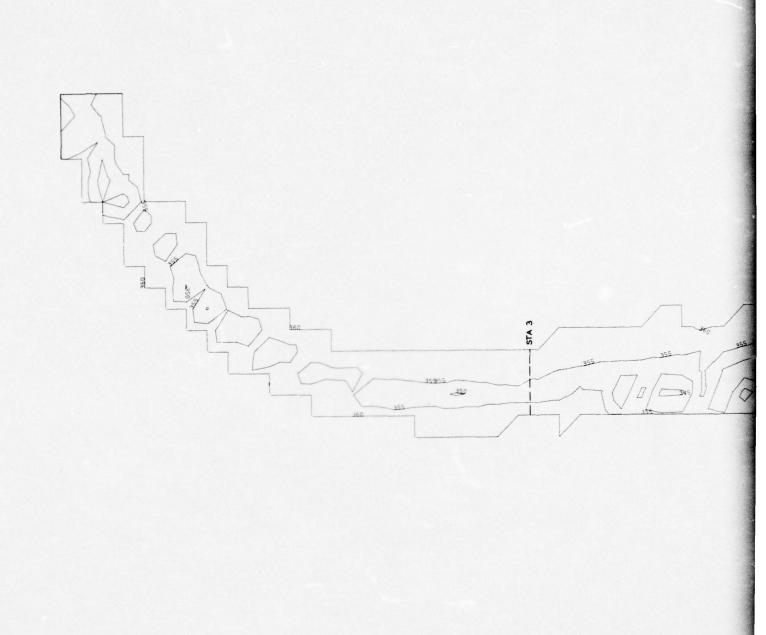
SCALE IN FEET

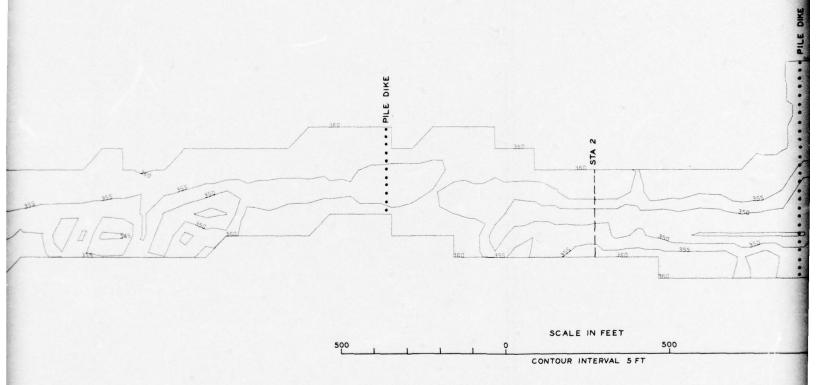
500 1000

CONTOUR INTERVAL 5 FT

SIDE CHANNEL KASKASKIA

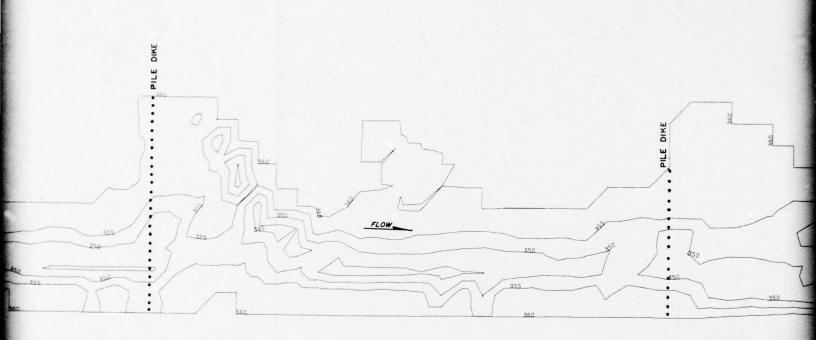




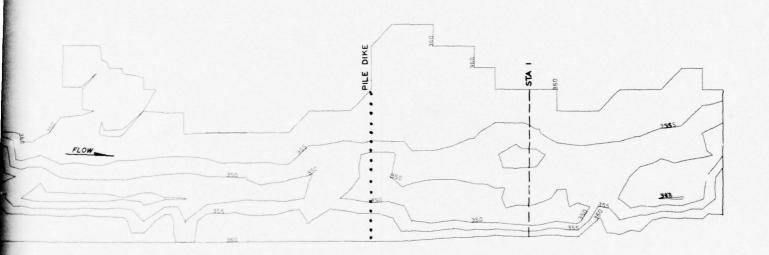


SIDE CHANNEL CRAINS



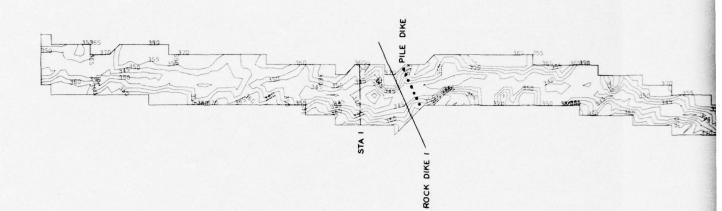


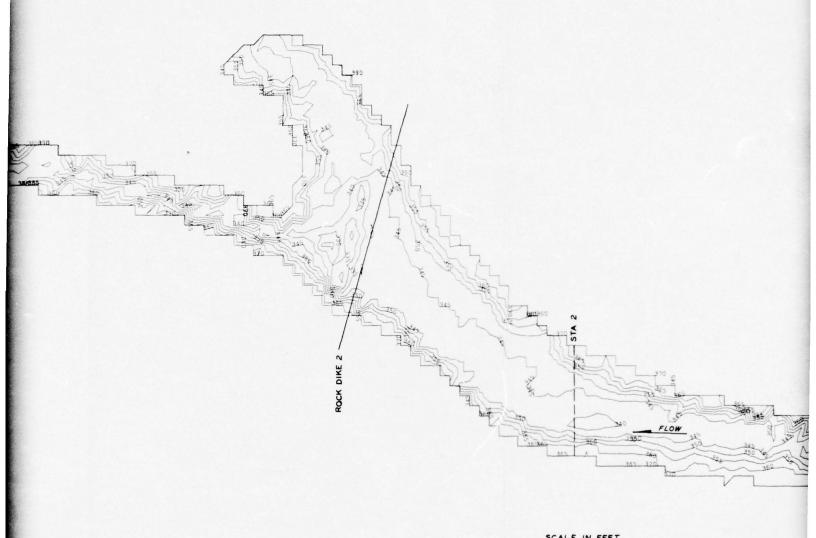
INS



MAP Ⅱ-8.

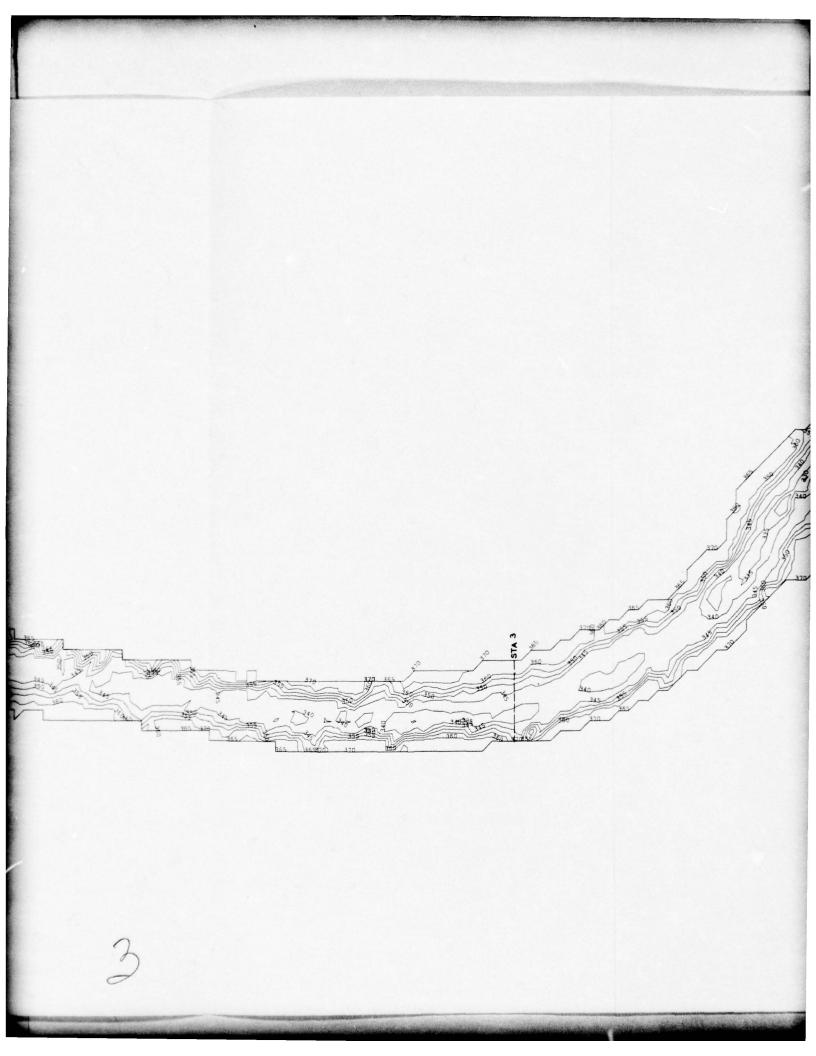


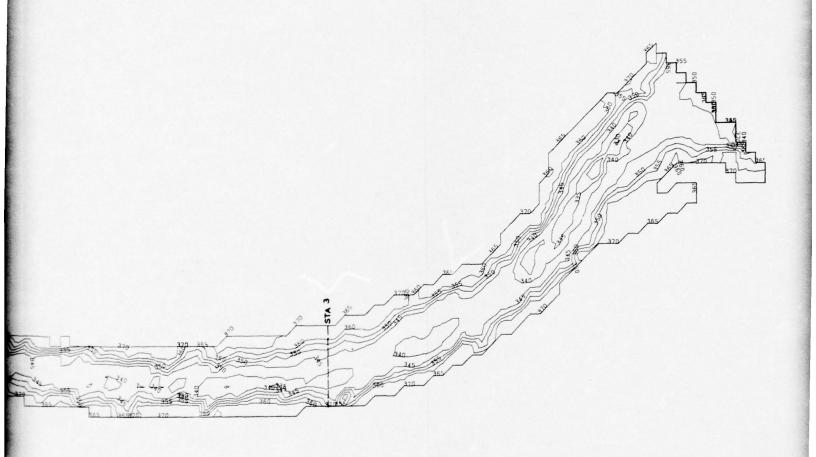




SIDE CHANNEL LIBERTY

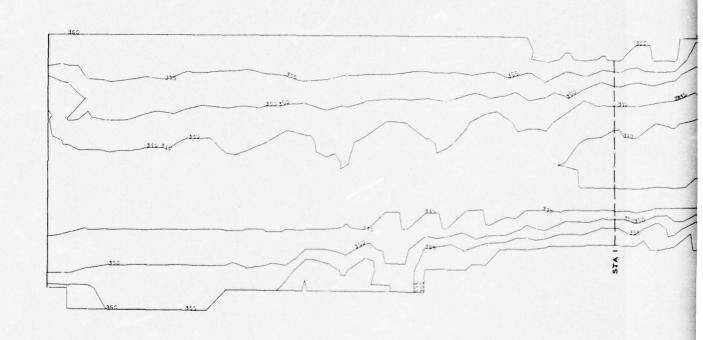


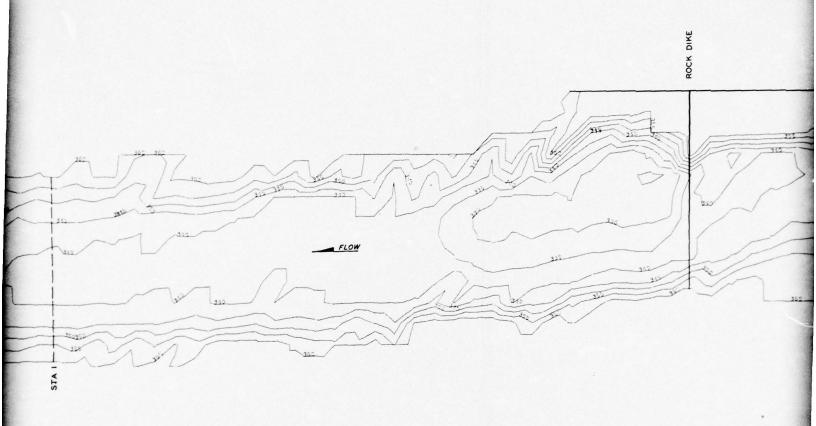




MAP Ⅱ-9

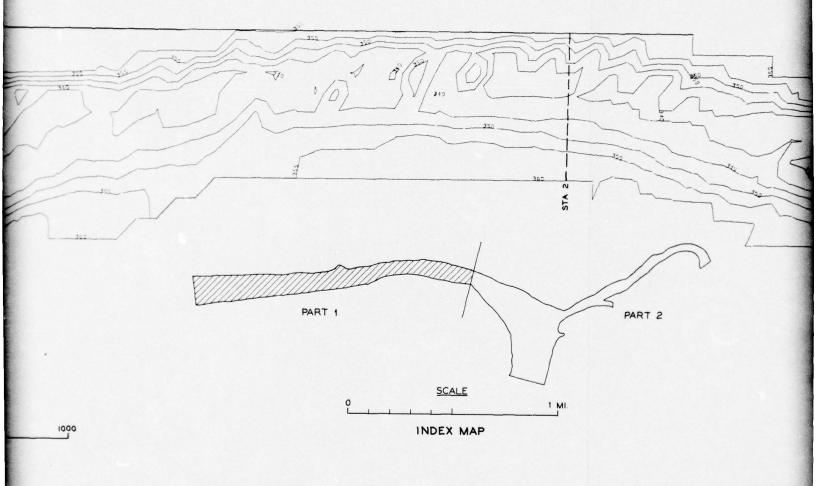


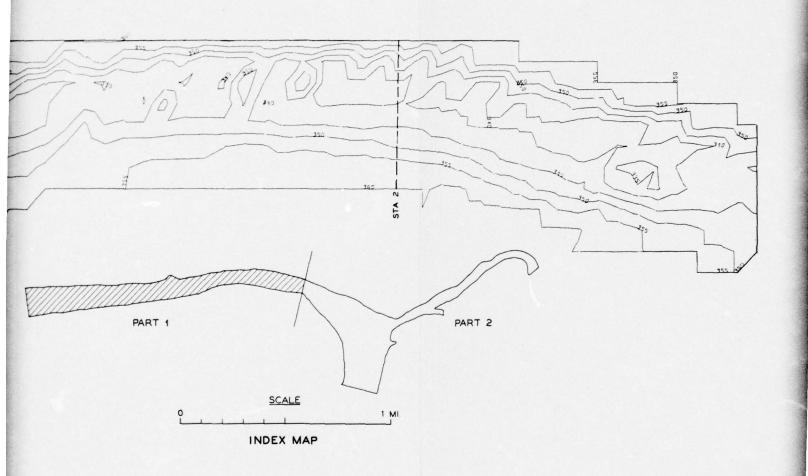






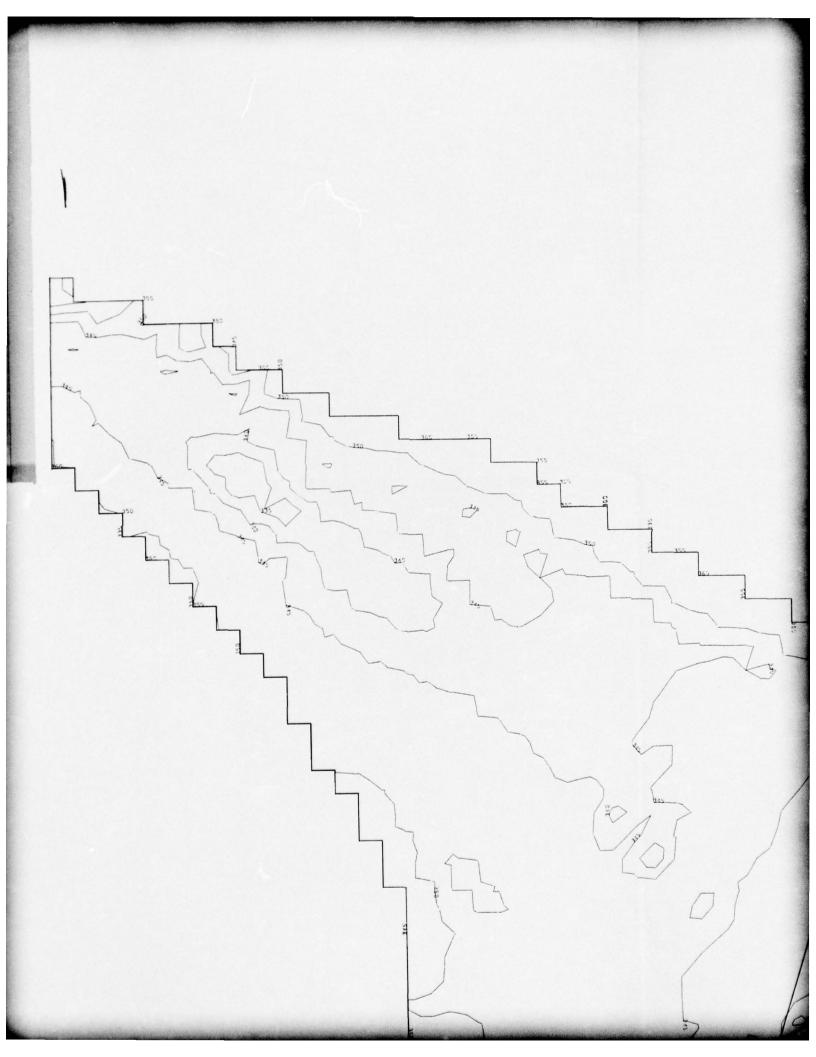
SIDE CHANNEL JONES, PART 1

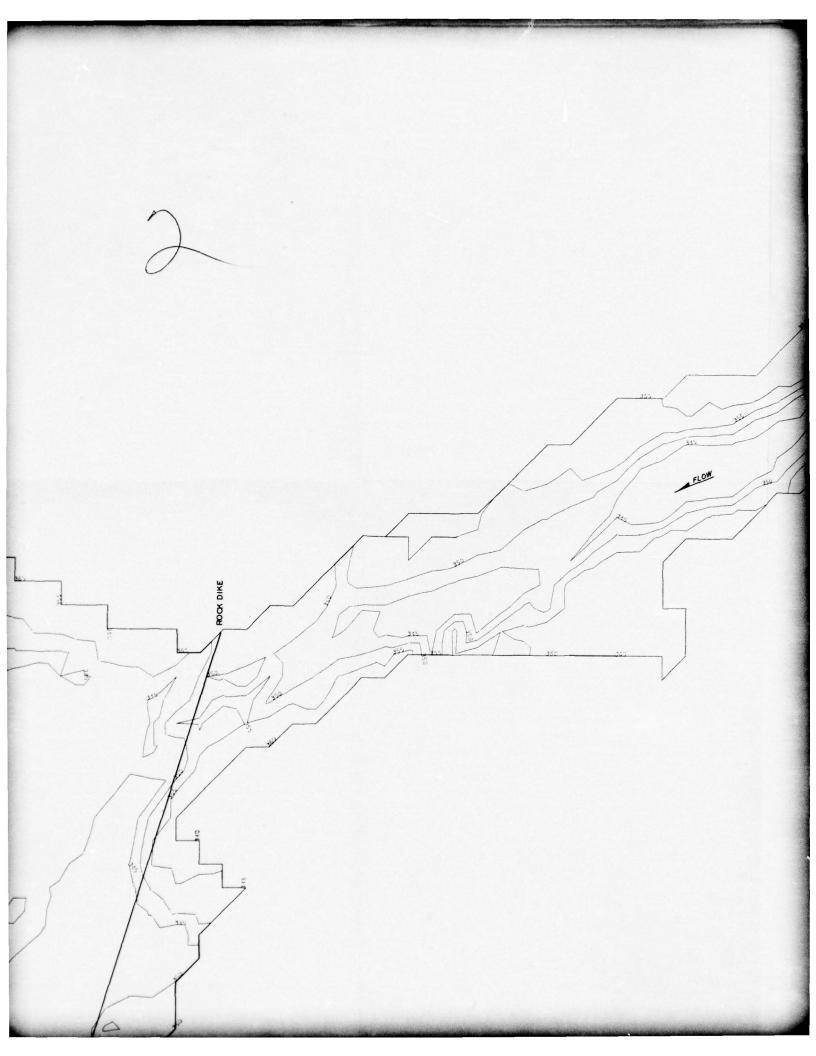


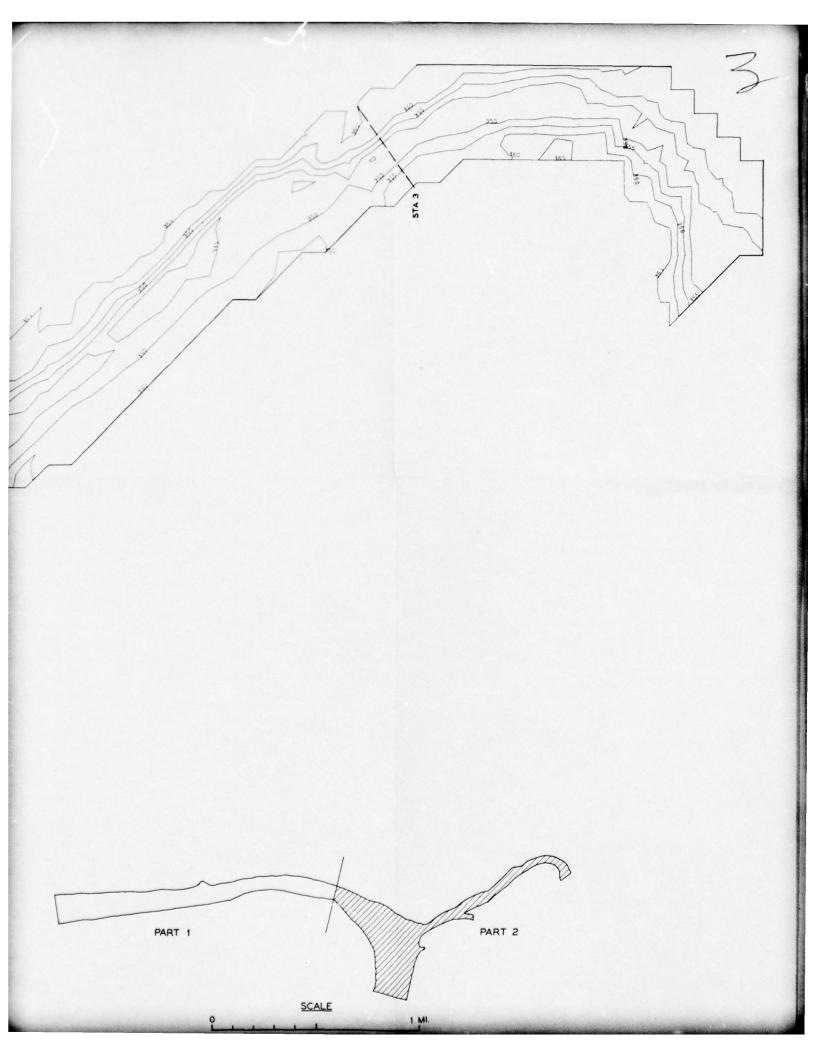


МАР П-10 а

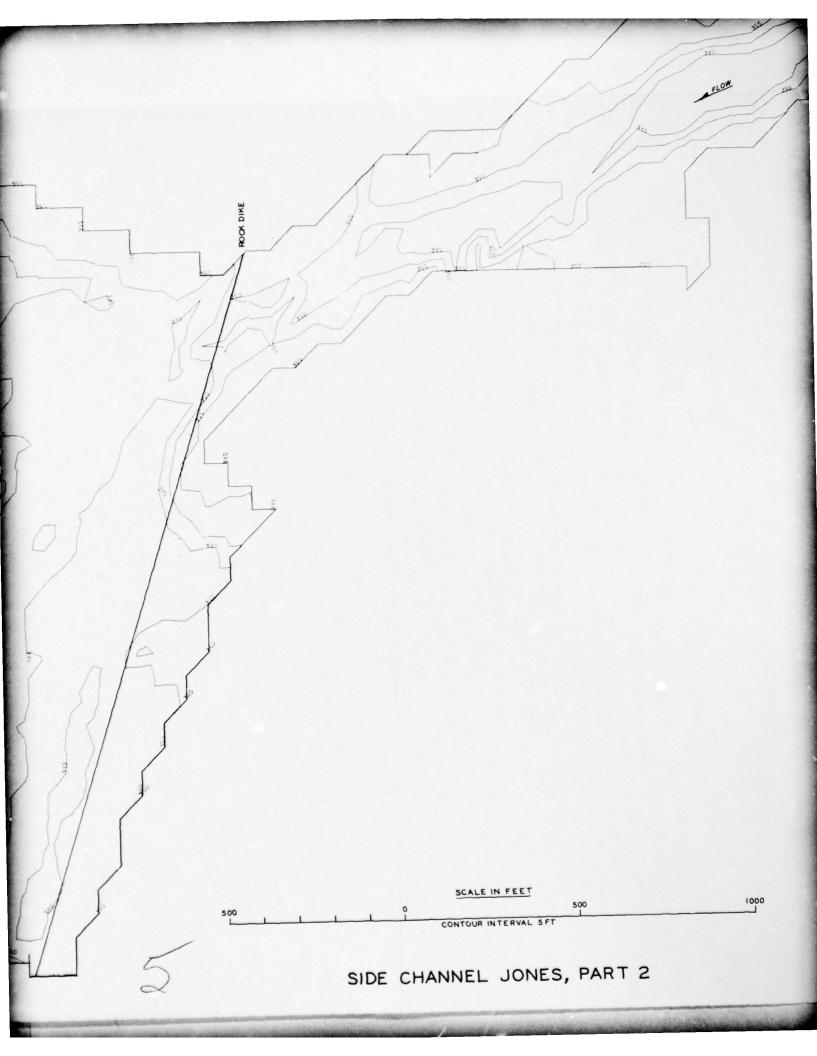


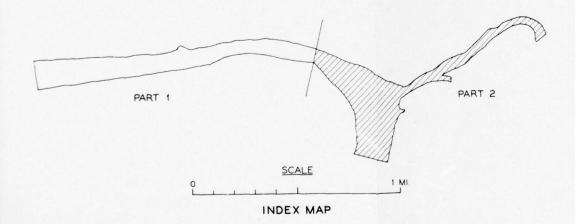




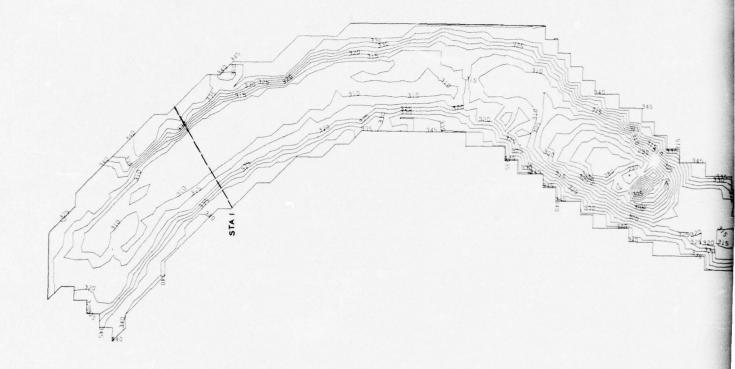




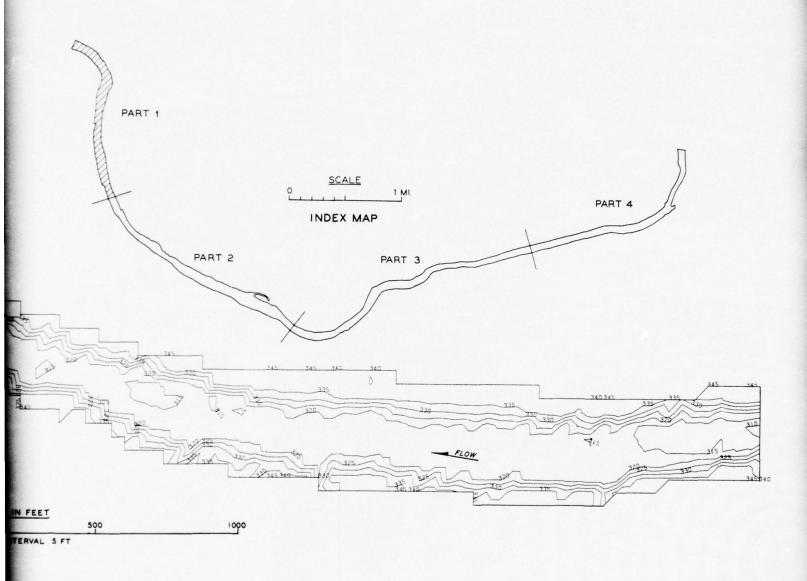






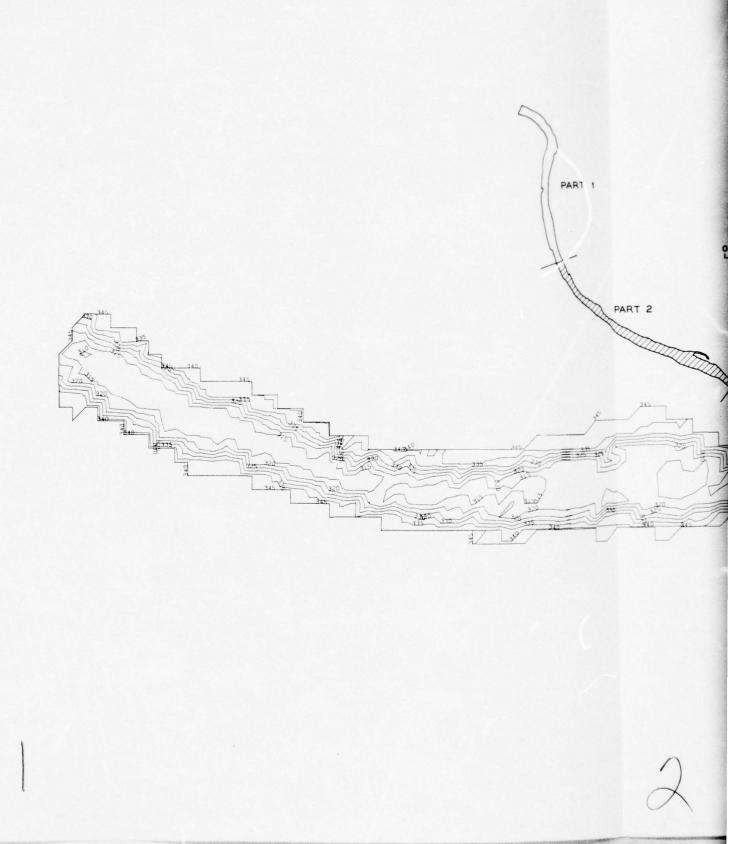


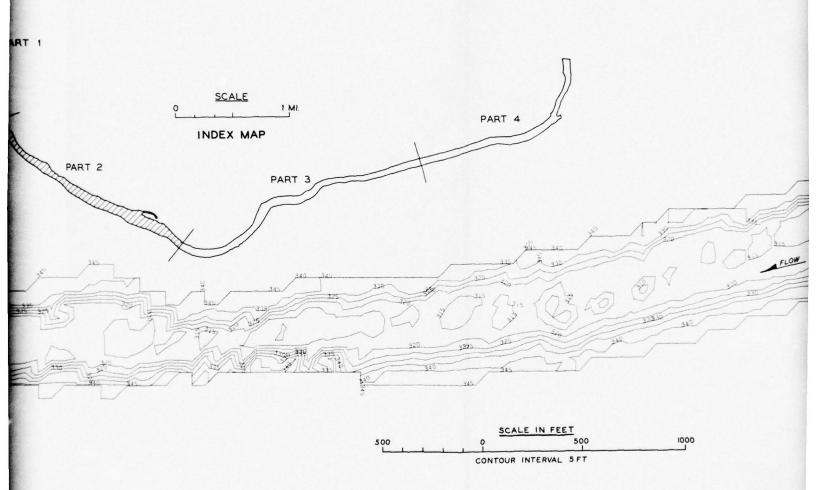
SIDE CHAN



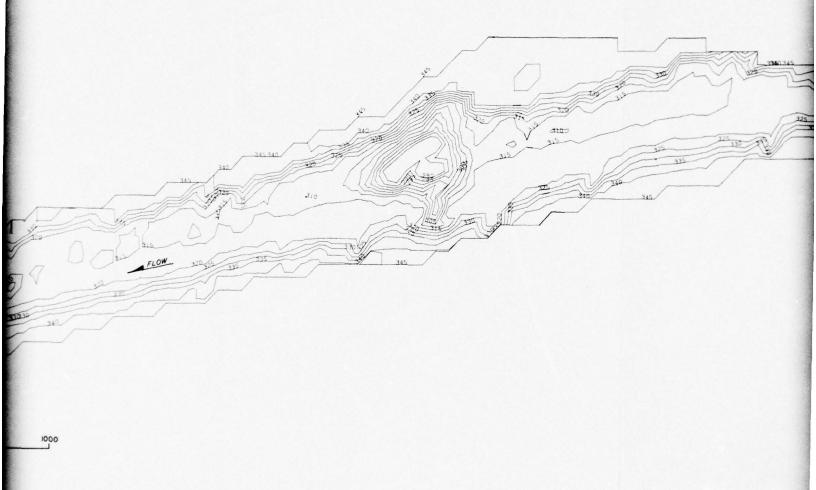
ICAYUNE, PART 1

MAP Ⅱ-11a

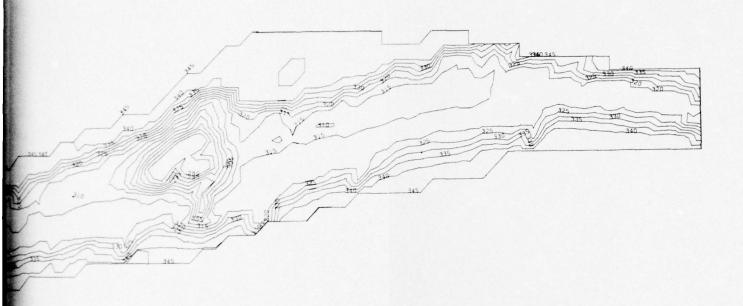




SIDE CHANNEL PICAYUNE, PART 2

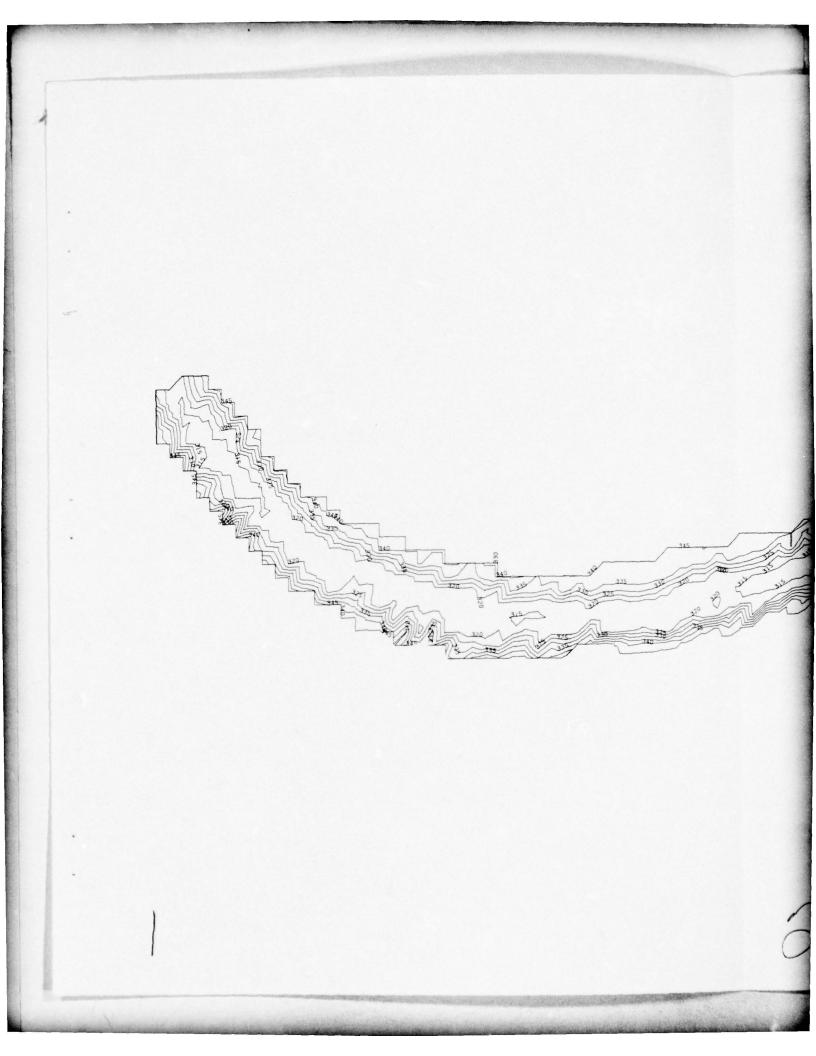


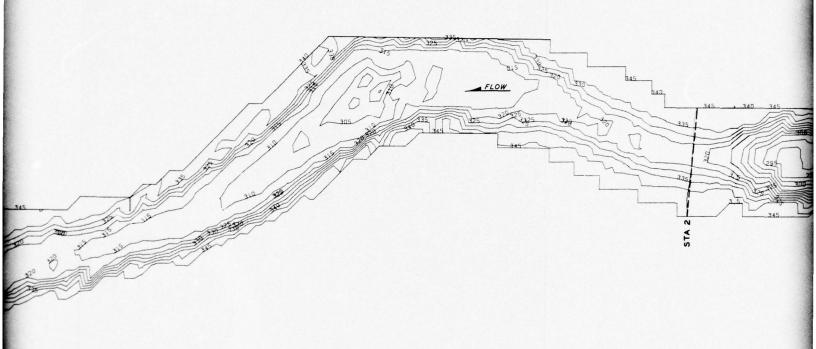
PART 2



MAP □-11 b

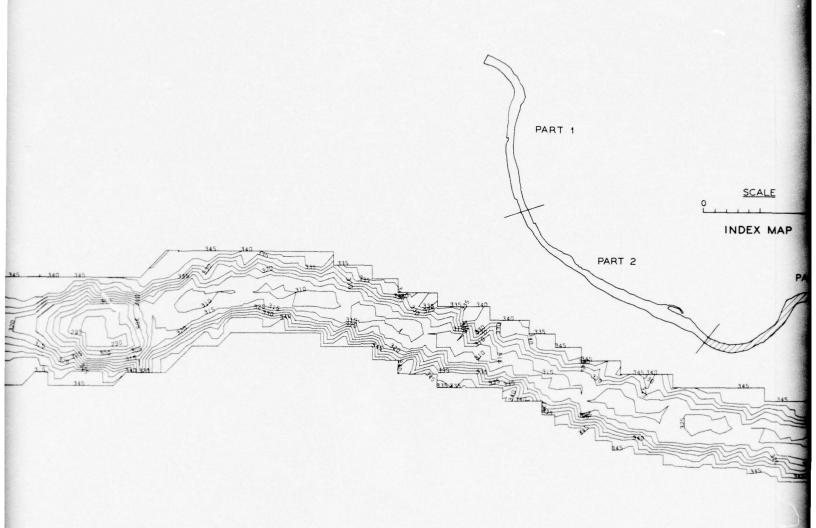






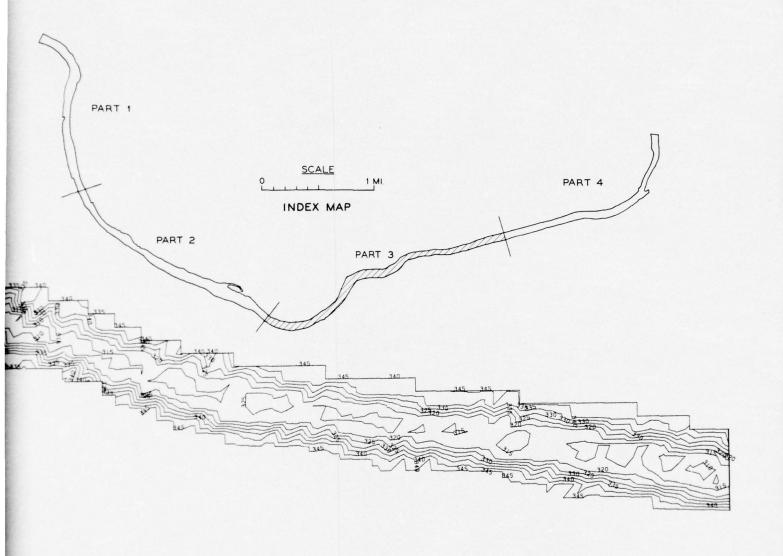
CONTOUR INTERVAL 5 FT

SIDE CHANNEL PICAYUNE, PAR



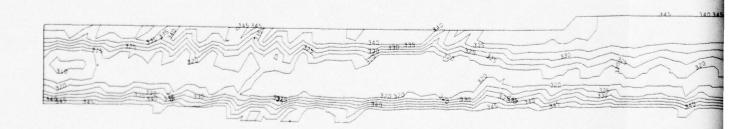
500 1000 L 5FT

YUNE, PART 3

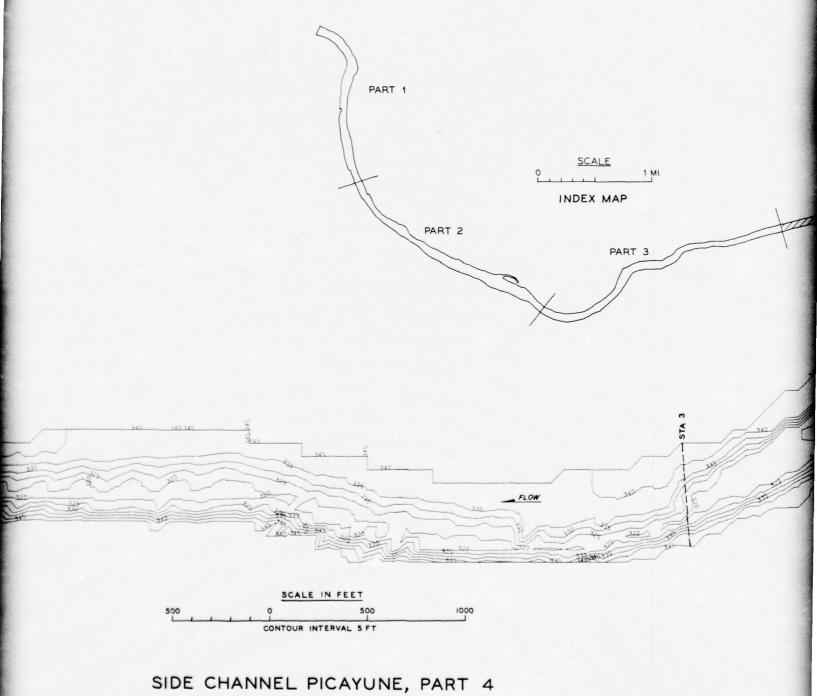


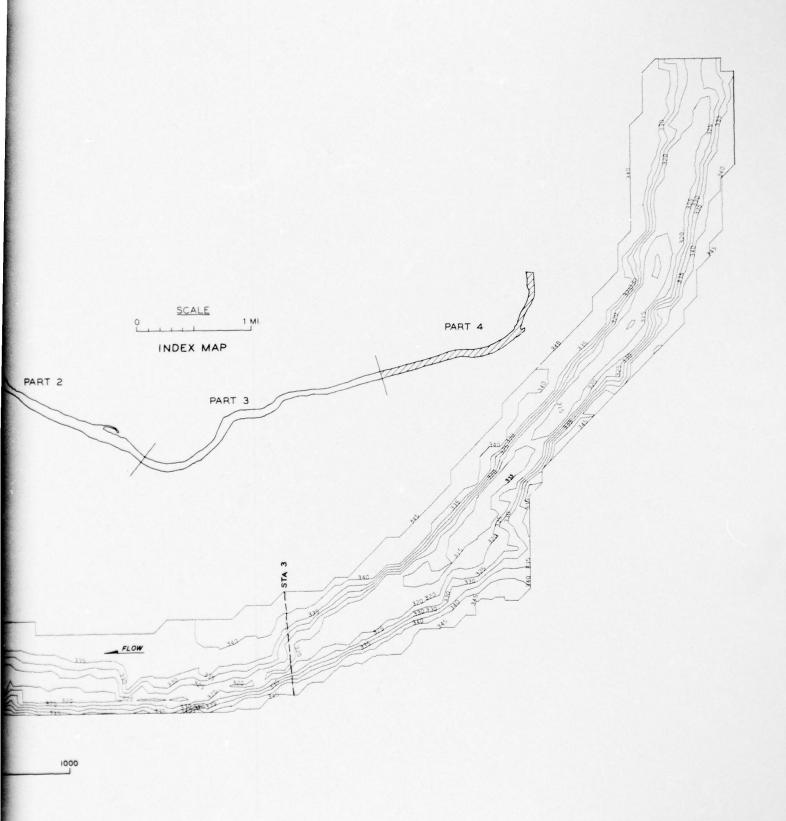
МАР ∐-11 с





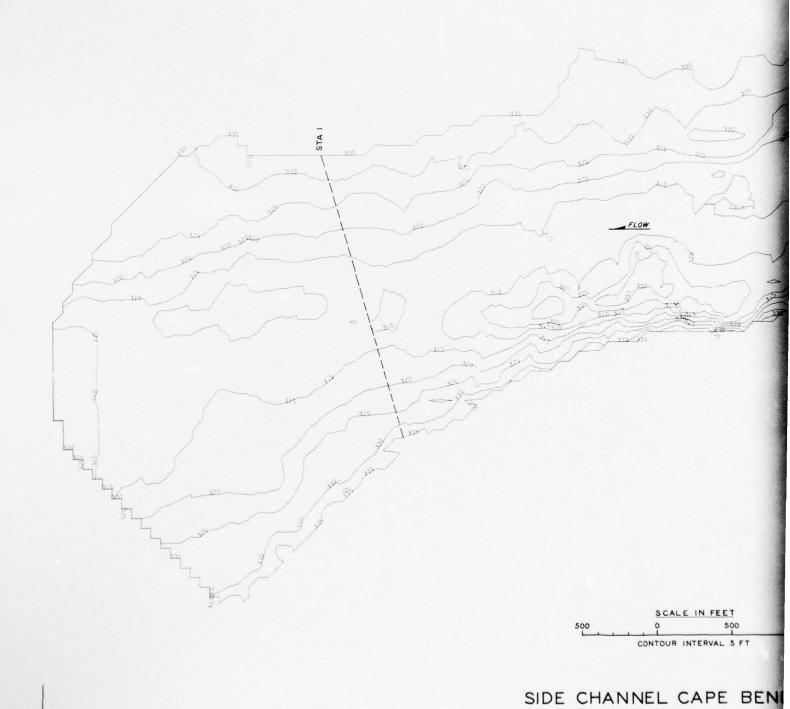
SIDE

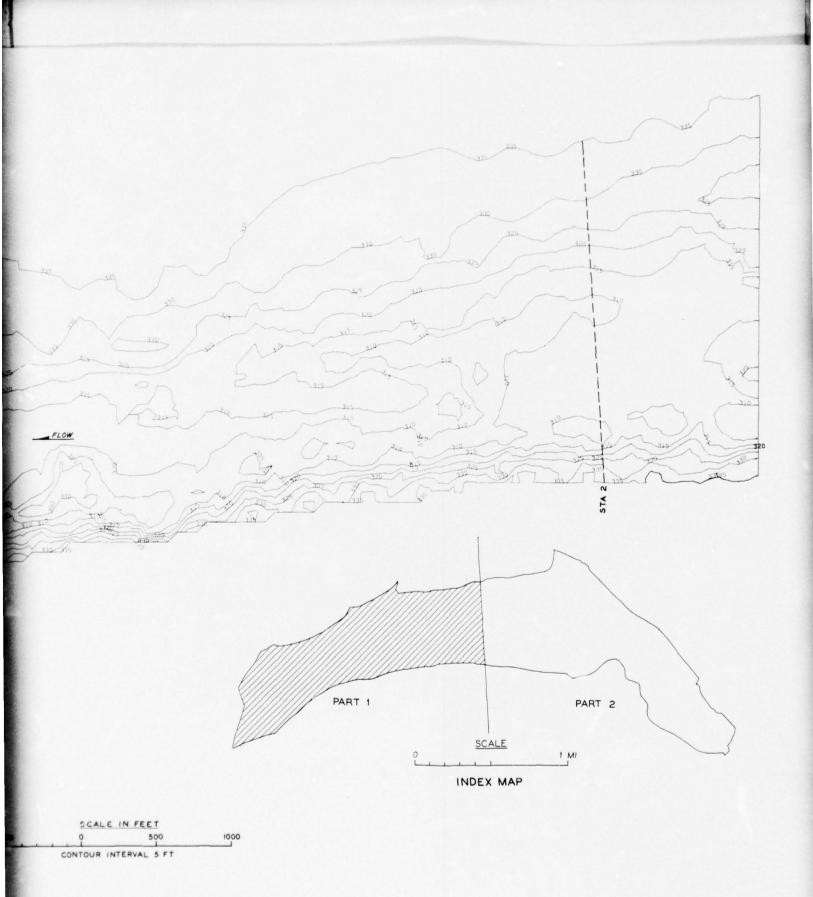




, PART 4

MAP II-11d



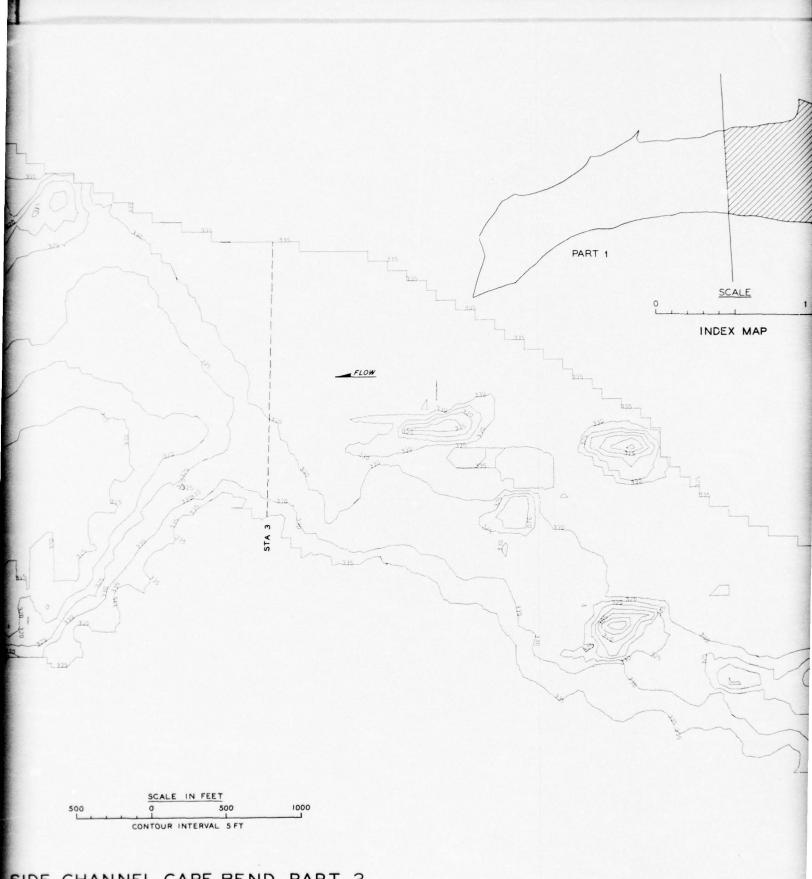


HANNEL CAPE BEND, PART 1

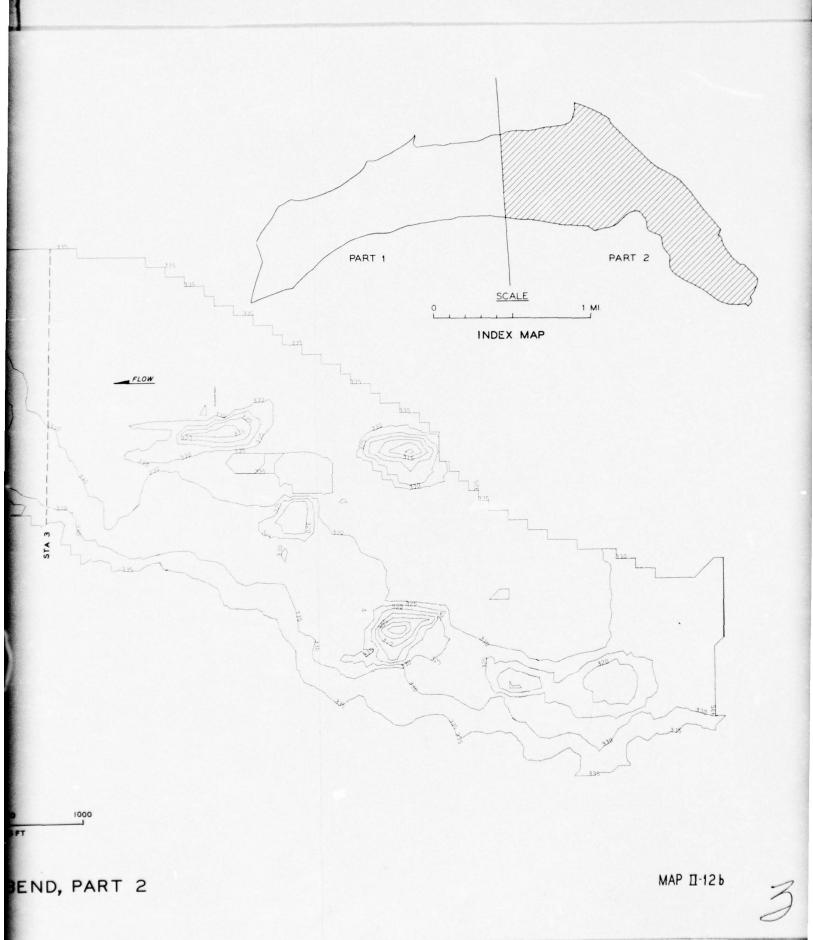
МАР II-12 a

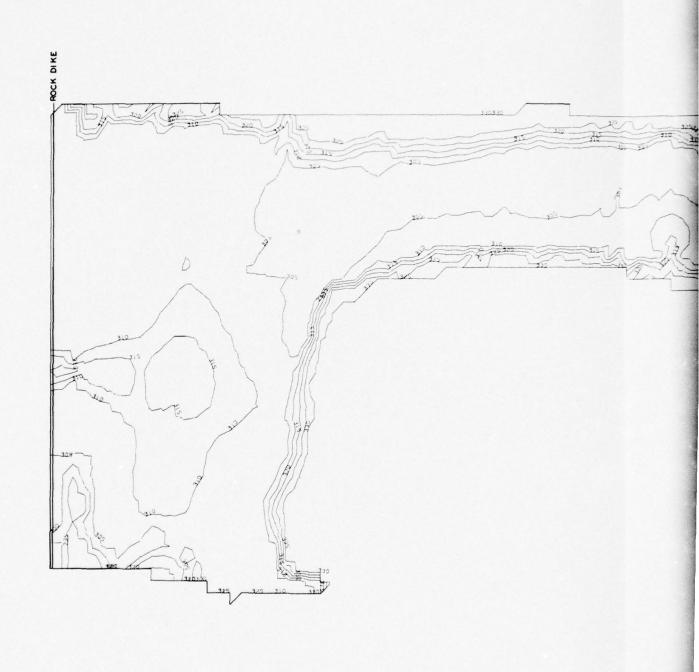


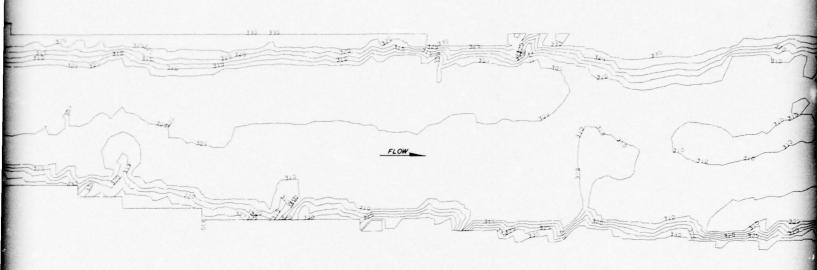
SIDE CHANNEL

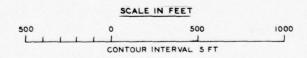


SIDE CHANNEL CAPE BEND, PART 2

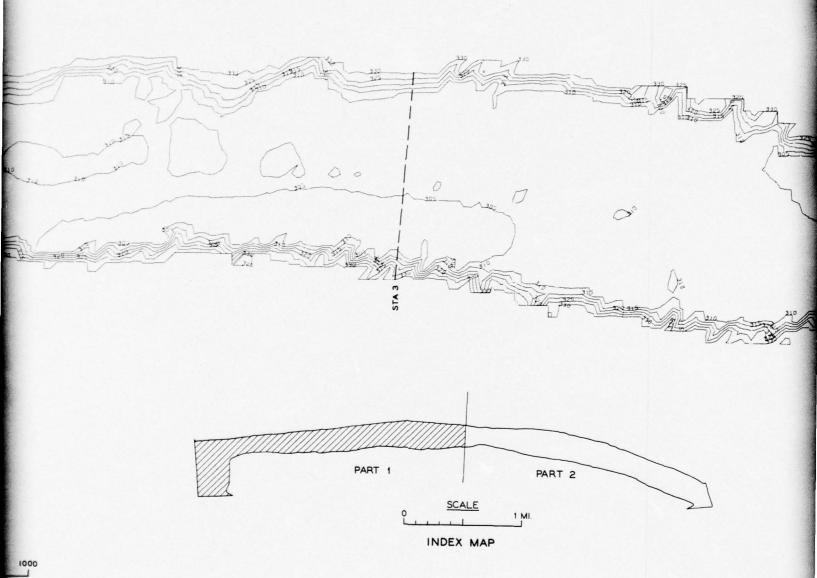




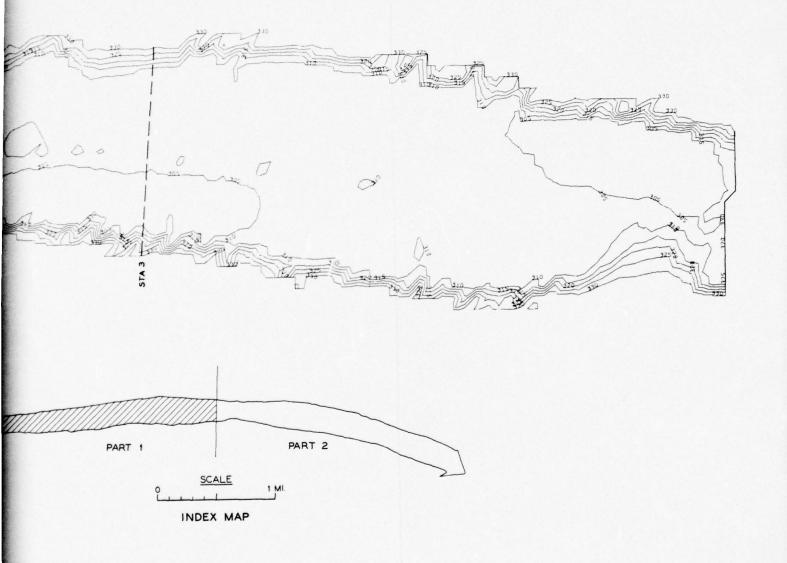




SIDE CHANNEL SANTA FE, PART 1

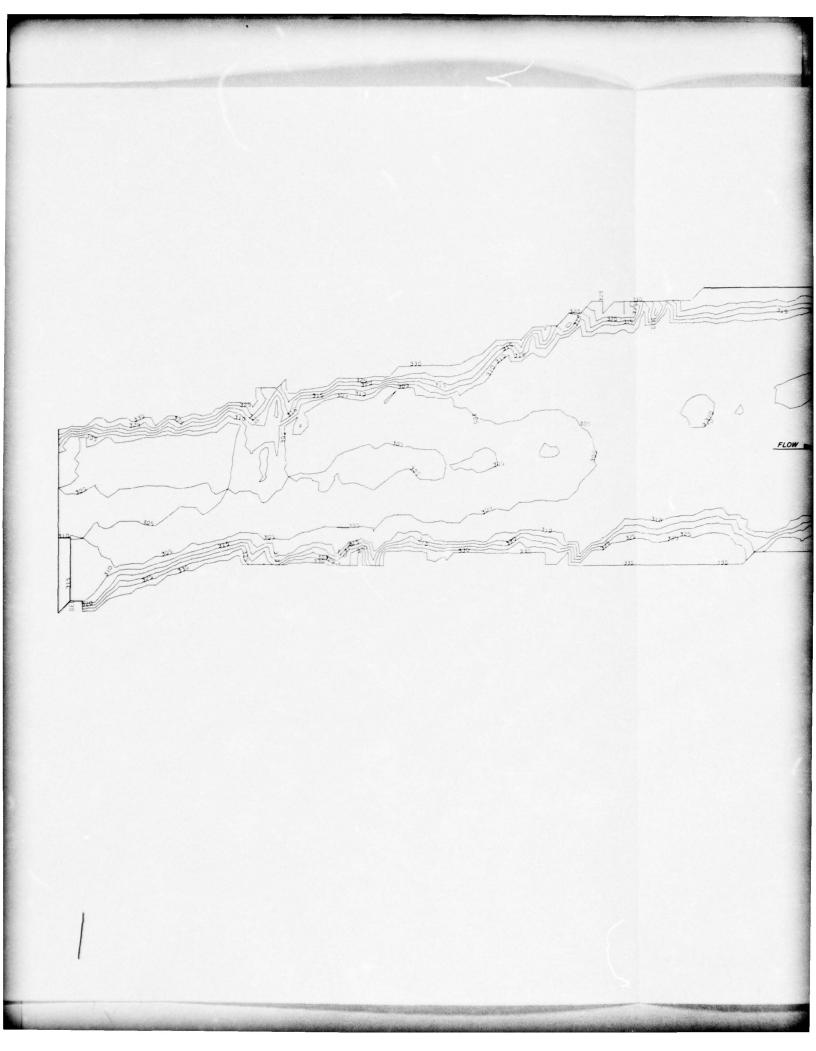


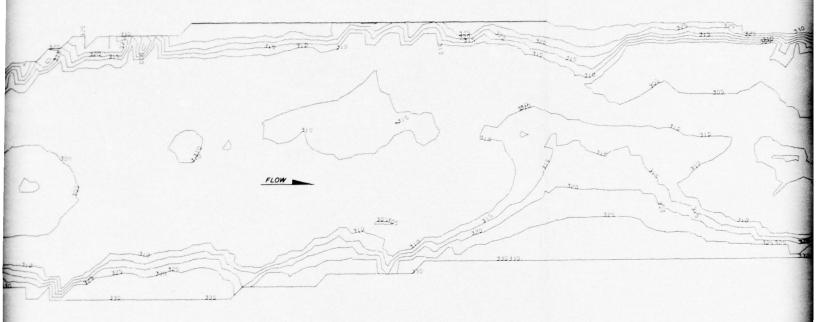
ART 1



MAP **□-13**a

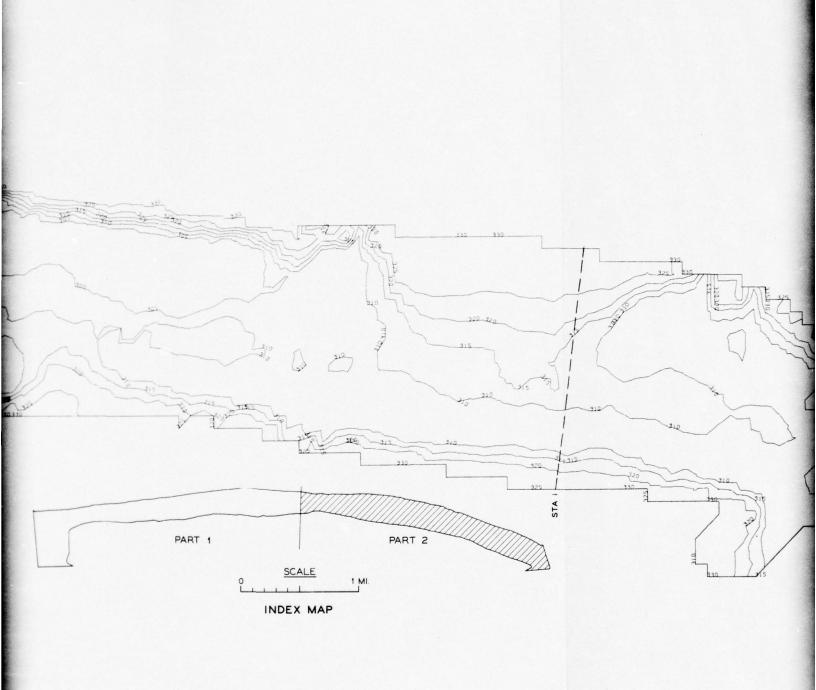


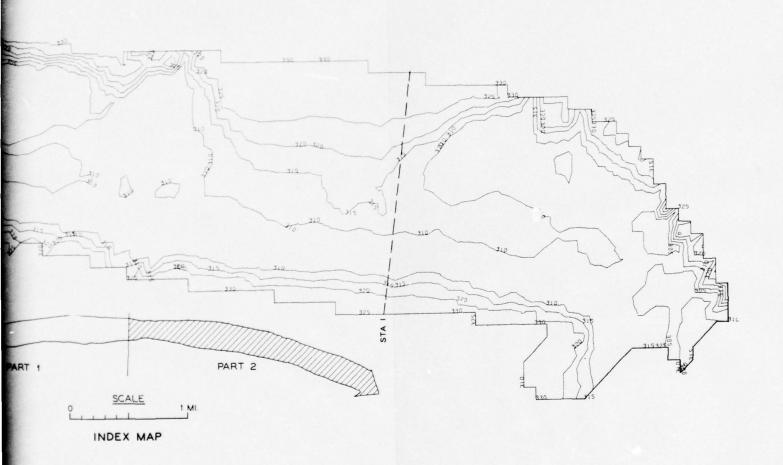






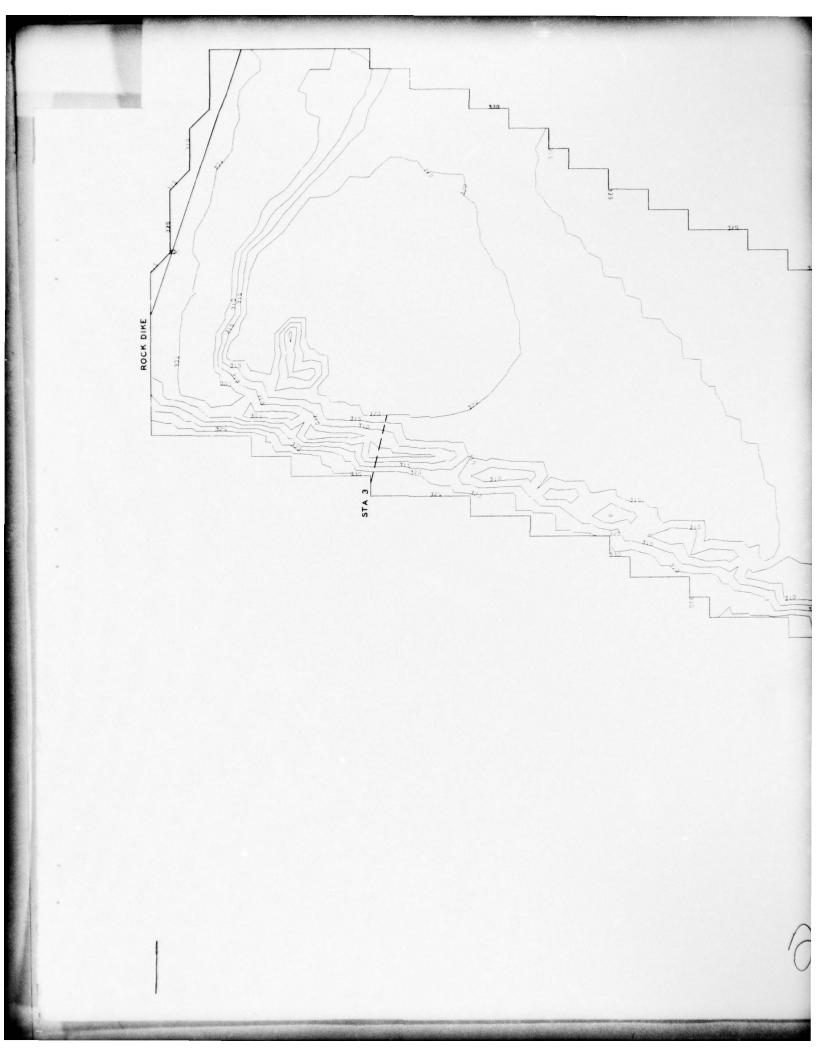
SIDE CHANNEL SANTA FE, PART 2





МАР П-13Ь





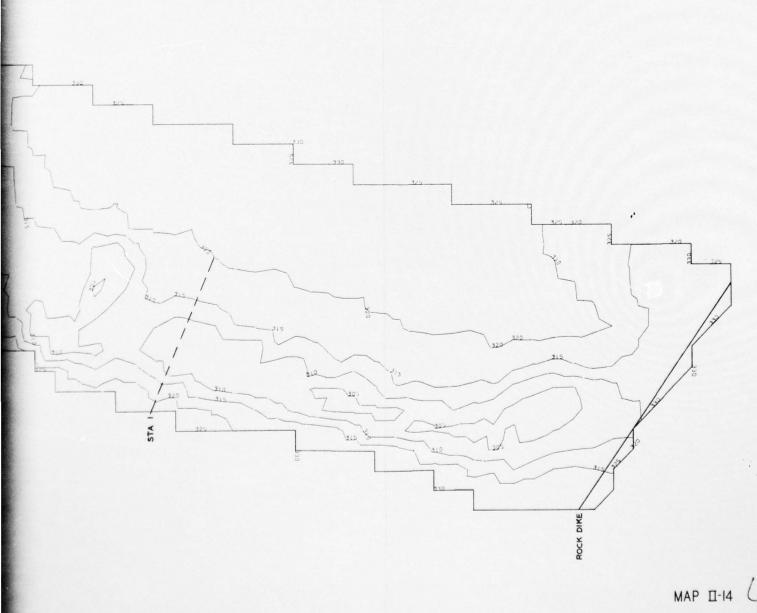


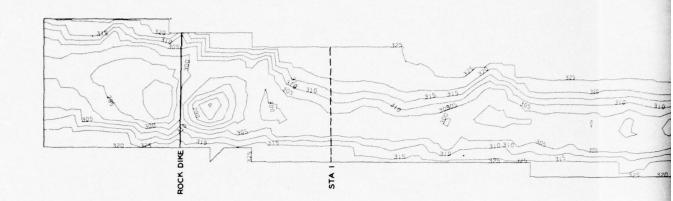


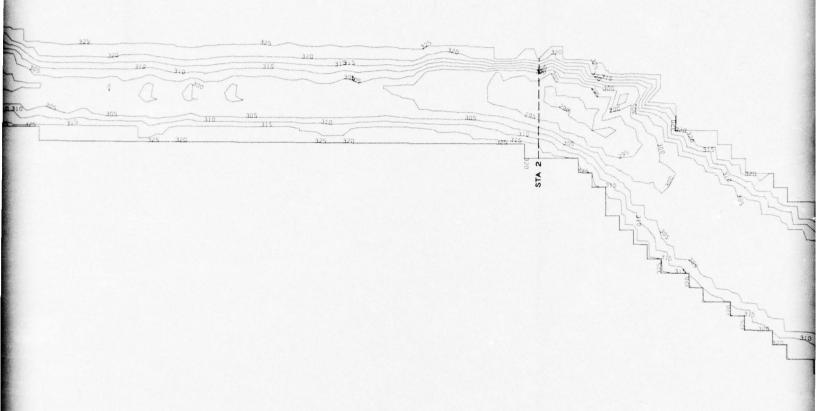
SIDE CHANNEL BILLINGS

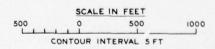
ルメ





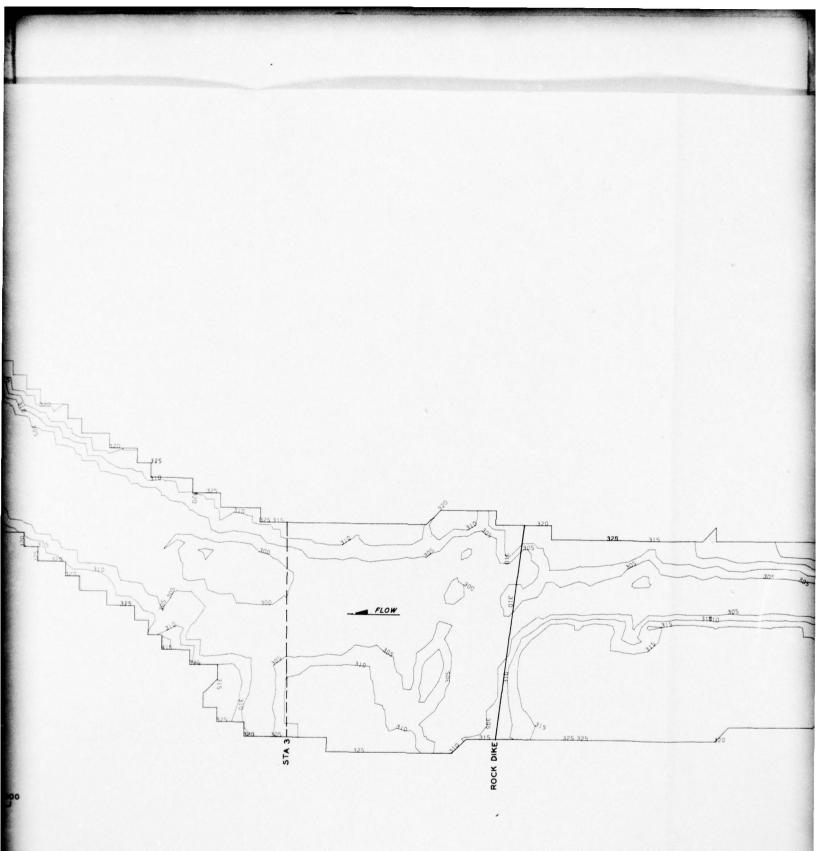




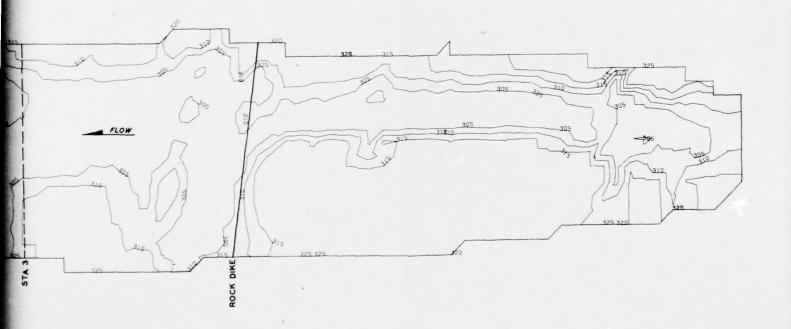


SIDE CHANNEL BUFFALO

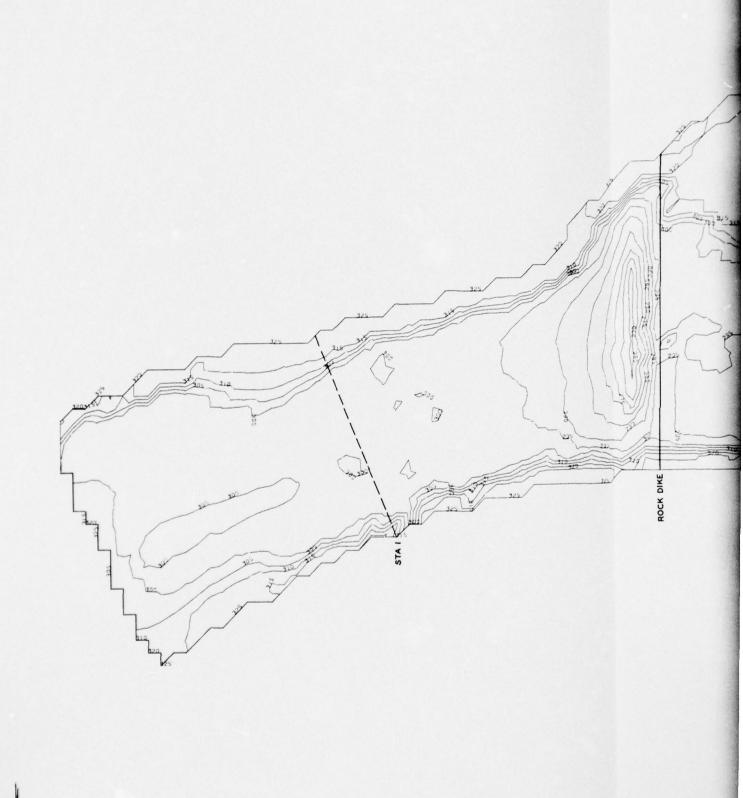




ALO



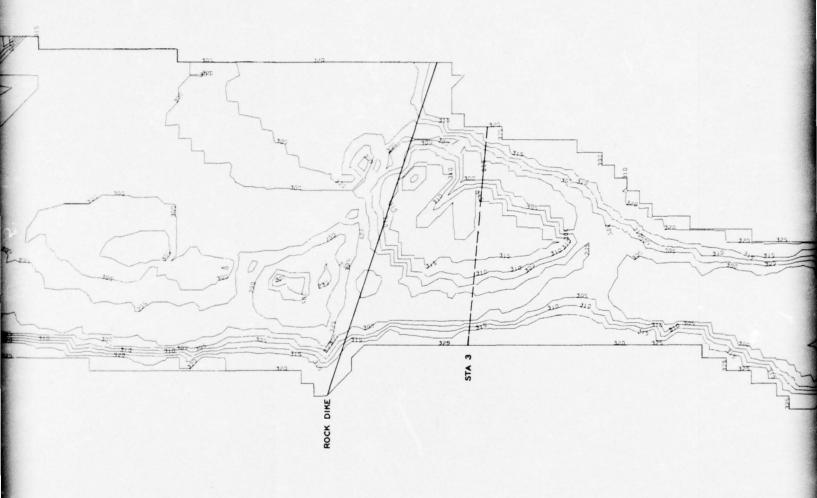
MAP Ⅱ-15



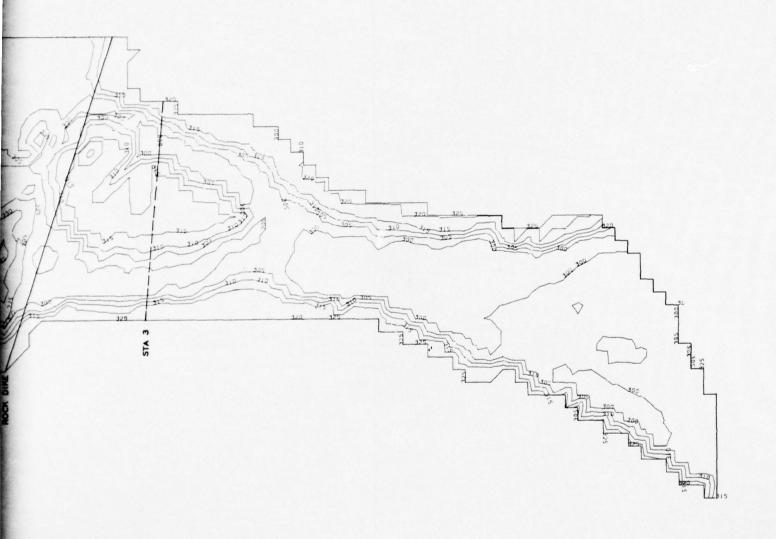




SIDE CHANNEL BROWNS

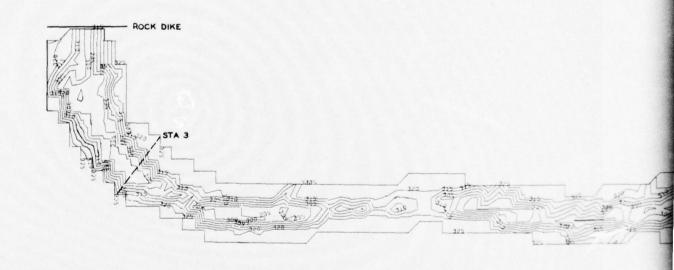


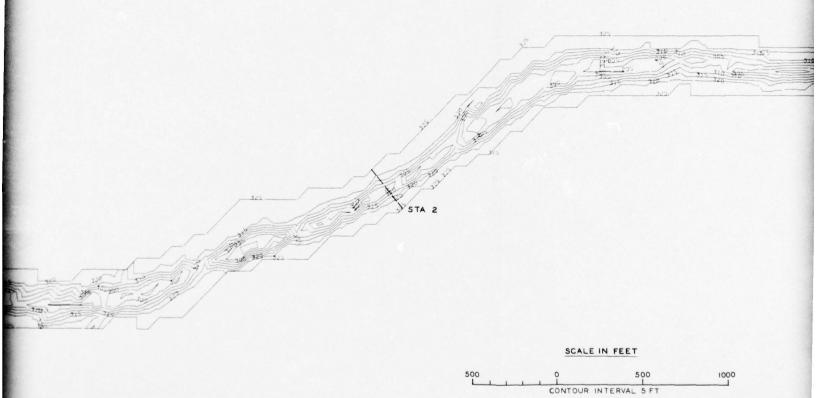
BROWNS



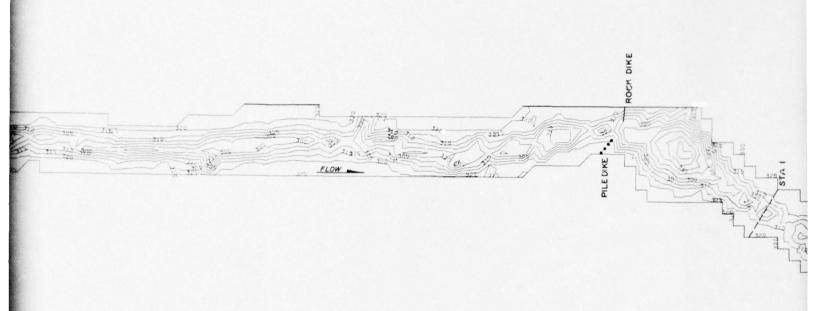
МАР ∐-16







SIDE CHANNEL THOMPSON



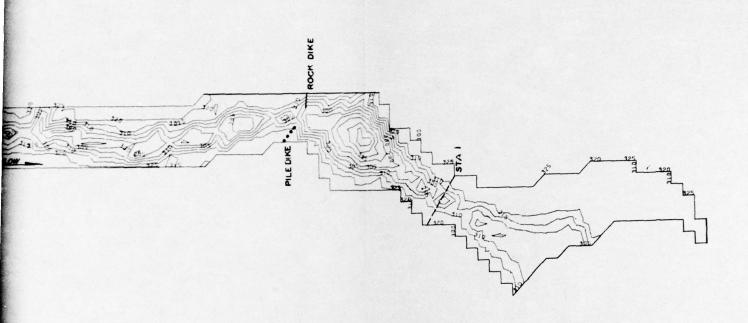
IPSON

AD-A031 771

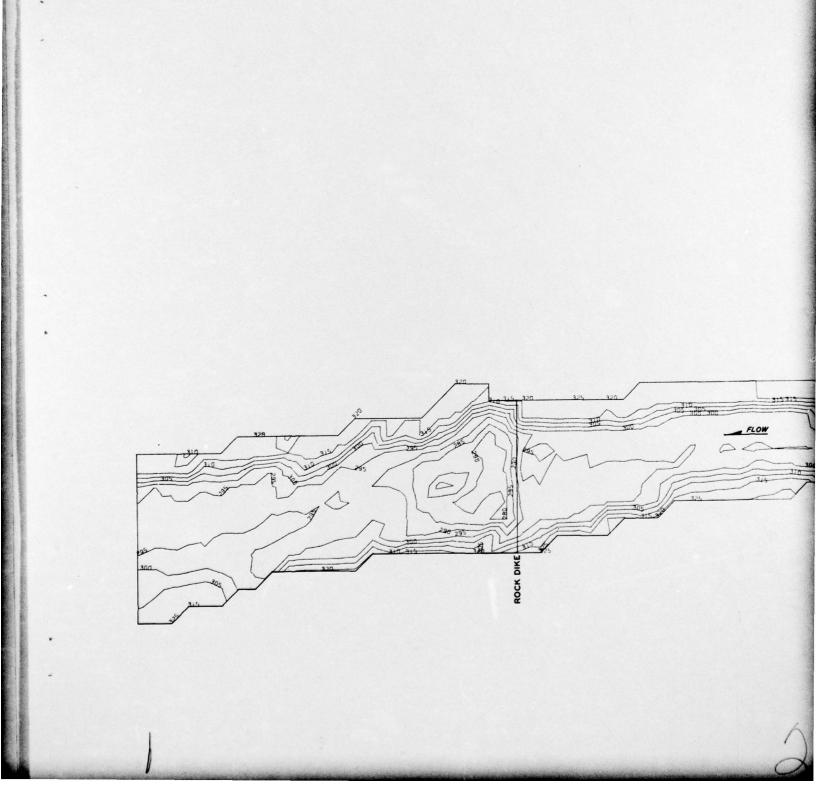
ARMY ENGINEER WATERWAYS EXPERIMENT STATION VICKSBURG MISS F/G 8/8
COMPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISS--ETC(U)
JUN 74 V E LAGARDE, S J WINFREY
WES-TR-M-74-5-VOL-2

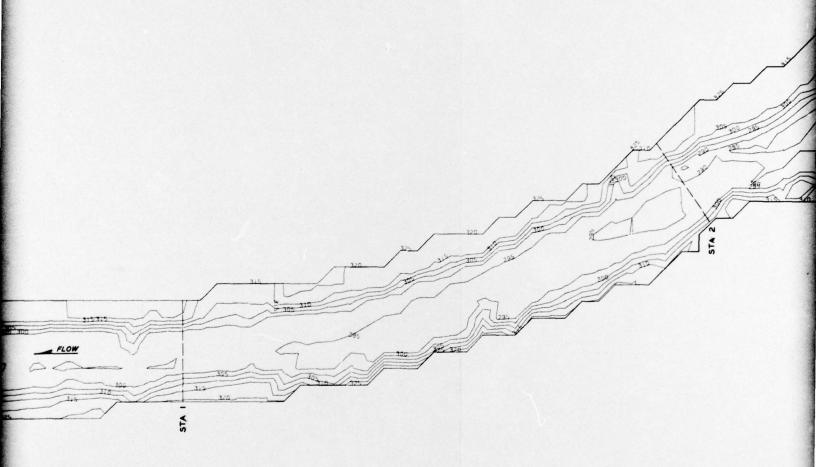
AMAGINTA

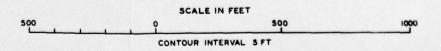
END
DATE
FAMED
12 - 76



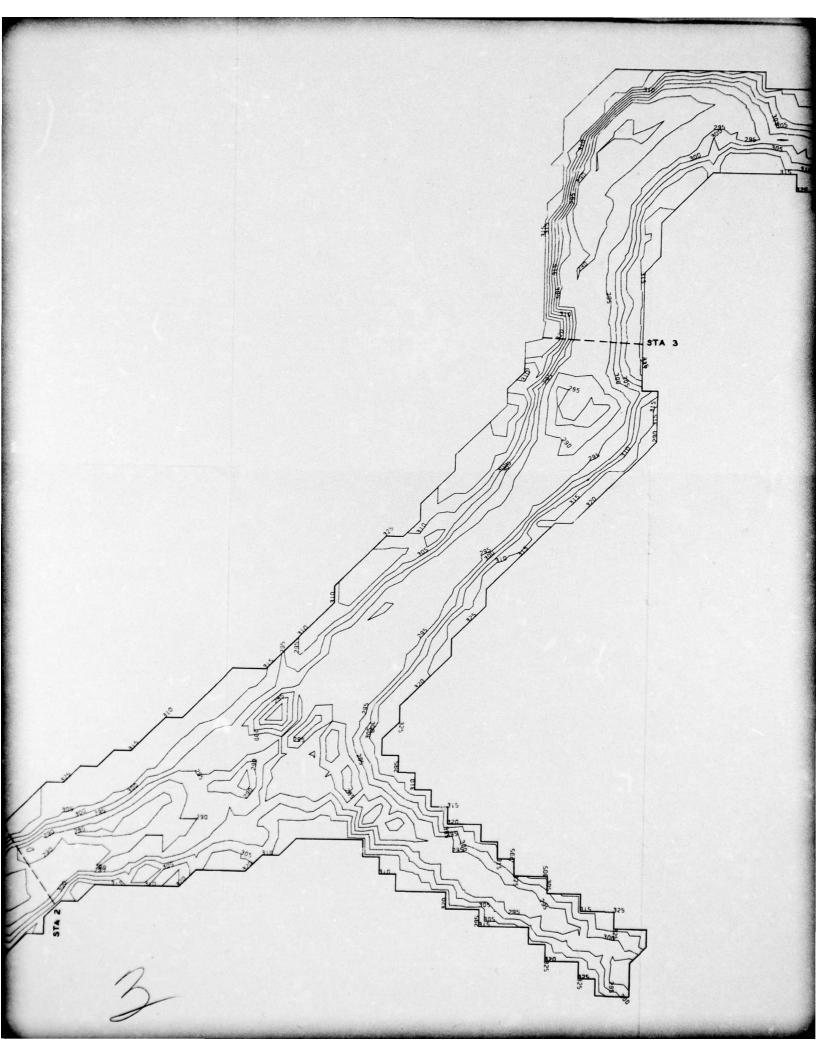
MAP II-17

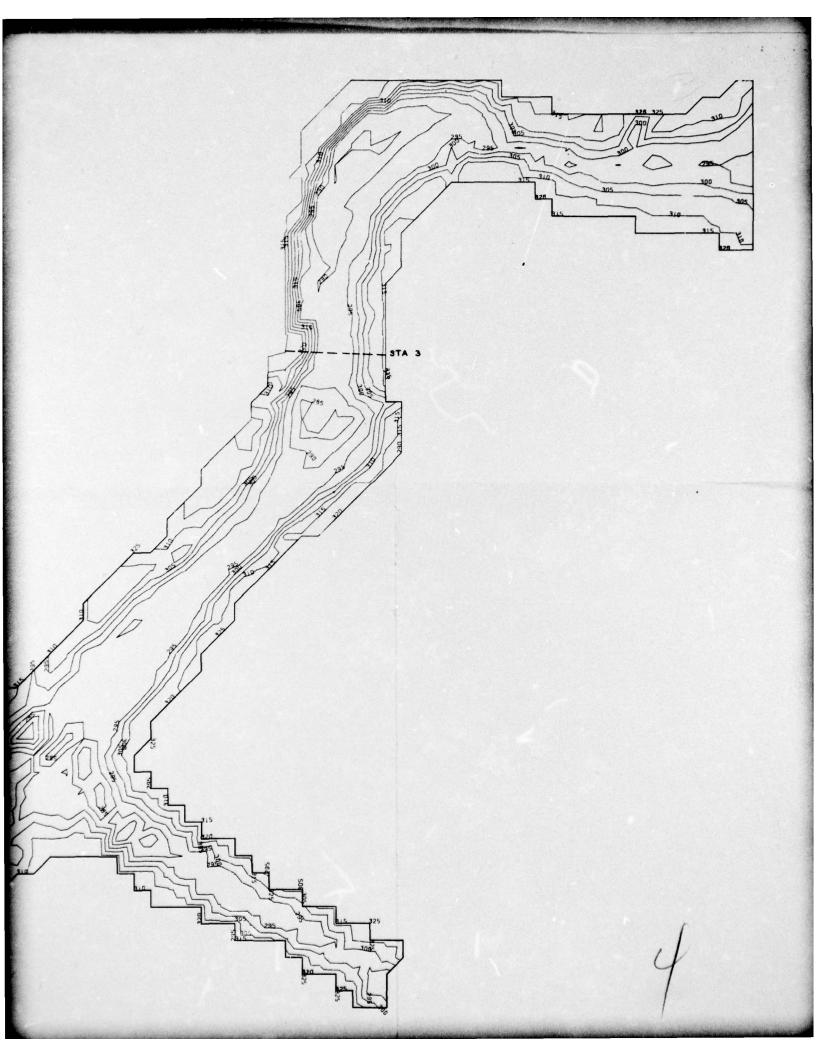






SIDE CHANNEL SISTER





CORT VILE MPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. DECHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. PLEMENTURE MOTES (Type of report and inclusive dates) 100 C 2 volumes 100 Technology 101 March 102 (Type of report and inclusive dates) 102 Technology 103 Technology 104 No. of REFT. 105 No. of REFT. 105 No. of REFT. 106 No. of REFT. 107 No. of REFT. 108 No. of REFT. 109 No. of RE	S. Army Engineer Waterways Experiment Station S. Army Engineer Waterways Experiment Station Details of the State of the	S. Army Engineer Waterways Experiment Station S. Army Engineer Waterways Experiment Station Unclassified B. GROUP Unclassified B. GROUP DISTRICT CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER BE CHANNELS, Volume II. SIDE-CHANNEL CONTOUR MAPS. CRIPTIVE NOTES (Type of report and inclusive dotes) Lume 2 of 2 volumes HORGI (First mans, middle initial, issi news) Stor E. A. Garde Luce J. Winfrey DISTRICT OR GRANT NO. Technical Report M-714-5, Volume 2 DOTHER REPORT HO(8) (Any other numbers that may be assigned this report) TRIBUTION SYATEMENT DISTRICT OF GENERAL REPORT HO(8) (Any other numbers that may be assigned this report) U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	S. Army Engineer Waterways Experiment Station S. Army Engineer Waterways Experiment Station Unclassified ID. GROUP ID		CUMENT CONTROL DATA -	
S. Army Engineer Waterways Experiment Station cksburg, Mississippi PORT VILL IMPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS, Volume II. SIDE-CHANNEL CONTOUR MAPS. SCRIPTIVE MOYES (Type of report and inclusive dates) clume 2 of 2 volumes THORISI (Plest name, alides Initial, Isel name) ctor E. /LaGarde muel J. Winfrey PORT VILL 23 720 None Technical Report M-74-5, Volume 2 Technical R	S. Army Engineer Waterways Experiment Station Whosissippi DAY VILE REPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER WE CHANNELS: Volume II: SIDE-CHANNEL CONTOUR MAPS. CENTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORIGI (First name, aldde initial, last name) PLOTON OF GRANT NO. DIECT NO. Technical Report M-74-5, Volume 2 DO OTHER REPORT HO(8) (Any other numbers that may be essigned in the report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. TRIBUTION STATEMENT OF OTHER REPORT HO(8) (Any other numbers that may be essigned in the report) U. S. Army Engineer District, St. Louis Office of Environmental Resources	S. Army Engineer Waterways Experiment Station Unclassified the Shoup ONT VIVE OPPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER OF CHANNELS, Volume II. SIDE-CHANNEL CONTOUR MAPS. CRIPTIVE NOTES (Type of report and inclusive doise) Lume 2 of 2 volumes HORGI (First name, citche initial, lest name) Stor E. LaGarde Ruel J. Winfrey TECHNICAL REPORT MOTES (Type of report and inclusive doise) Technical Report M-74-5, Volume 2 Technical Report M-74-5, Volume 2 Technical Report M-019 (Any other numbers that may be accigned this report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. TRIBUTION STATEMENT OF OF OF OF OTHER REPORT MOTES (ANY NOTES St. Louis Office of Environmental Resources St. Louis, Missouri	S. Army Engineer Waterways Experiment Station Unclassified 13. GROUP ONT VILE MPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS: Volume II: SIDE-CHANNEL CONTOUR MAPS. CALPTIVE NOTES (Type of report and inclusive dotes) Lume 2 of 2 volumes MORED (Pict come, elde initial, isel name) PLOTE L. AGGARde muel J. Winfrey Technical Report M-74-5, Volume 2 The control of the report o		street and indexing annotation must	
MPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS: Volume II: SIDE-CHANNEL CONTOUR MAPS SCRIPTIVE MOTES (Type of report and inclusive dates) Outme 2 of 2 volumes THORISI (First mane, siddle initial, last name) cotor E./LaGarde muel J./Winfrey 72. TOTAL M. QF. PASEL 23 27 700 None Technical Report M-74-5, Volume 2 Ph. NO. Of REFE NO. Technical Report M-74-5, Volume 2 Ph. OTHER REPORT NO(9) (Any other numbers that may be assigned distribution unlimited. IPPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	PUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. CRIPTURE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORGE (First mans, elder initial, last name) PLECT NO. Technical report None 12. TOTAL M. OF PARE. 12. TOTAL M. OF PARE. None 12.	PROTECTION STATEMENT OPEN VITLE APPUTER - CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER OF CHANNELS: Volume II: SIDE-CHANNEL CONTOUR MAPS. CALPTIVE NOTES (Type of report and inclusive deles) Lume 2 of 2 volumes WORKE) (First nears, siddle inclusive deles) Letor E. Lagarde Ruel J. Winfrey The Characteristics of MIDDLE-MISSISSIPPI RIVER To THE CHARACTERISTICS OF MIDDLE MISSISSIPPI RIVER TO THE CHARACTER	CRAFTIVE NOTES (Type of report and inclusive decea) Lume 2 of 2 volumes CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS: Volume II: SIDE-CHANNEL CONTOUR MAPS. CARPTIVE NOTES (Type of report and inclusive decea) Lume 2 of 2 volumes MORISI (Pics reseas, addits initial, lest nesses) CHORISI (Pics reseas, addits initial		Experiment Station	
PUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. CRIPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (Vict name, aldde initial, less name) ACTION OF A CONTOUR MAPS. TO TOTAL MO OF PARTY AND TOTAL MO OF PARTY PUBLICATION OF ARRY NO. Technical Report M-74-5, Volume 2 D. OTHER REPORT HOIS) (Any other numbers that may be assigned this report) TRIBUTION STATEMENT DECYNOLOGY TO THE PORT HOIS) (Any other numbers that may be assigned this report) TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS (ANY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	PUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. CRIPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (Vict name, aldde initial, less name) ACTION OF A CONTOUR MAPS. TO TOTAL MO OF PARTY AND TOTAL MO OF PARTY PUBLICATION OF ARRY NO. Technical Report M-74-5, Volume 2 D. OTHER REPORT HOIS) (Any other numbers that may be assigned this report) TRIBUTION STATEMENT DECYNOLOGY TO THE PORT HOIS) (Any other numbers that may be assigned this report) TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS) (Any other numbers that may be assigned to the port M-74-5, Volume 2 TO THE PORT HOIS (ANY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	PUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER BE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. CARPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (First name, alide initial, last name) Stor E. LaGarde Ruel J. Winfrey 12. TOTAL M. OF PASSA None 12. TOTAL M. OF PASSA None 13. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	PUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER BE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS, CARPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (First name, alf-do in/lio), lost name) Store E. LaGarde Ruel J. Minfrey Technical Place No. 125. No. of REFS 23 12 720 None Technical Report M-74-5, Volume 2 30. OTHER REPORT NO. (Any other numbers that may be confined while report) TRIBUTION SYSTEMENT Droved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri			28. GROUP
MPUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. CRIPTIVE MOTES (Type of report and inclusive detect) Lume 2 of 2 volumes HORISI (First name, aligne initial, last name) Peter E. LaGarde nucl J. Winfrey Technical Report M-74-5, Volume 2 DECT NO. TECHNICAL REPORT NO(8) (Any other numbers that may be confined fills report) U. S. Army Engineer District, St. Louis Office of Environmental Resources	PUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. CRIPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (Vict name, alidio initial, loss name) ACTION CONTOUR MAPS. To the contour maps of report and inclusive dates) Lume 2 of 2 volumes To Total Mo. Of REFS None Technical Report M-74-5, Volume 2 DECT NO. TRIBUTION STATEMENT DECY NOTES (Any other numbers that may be confined in report) U. S. Army Engineer District, St. Louis Office of Environmental Resources	PUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER BE CHANNELS, Volume II. SIDE-CHANNEL CONTOUR MAPS. CARPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (First name, alidis initia), last name) Stor E. LaGarde August 1. Winfrey 12. TOTAL M. OF PARE 1. None 13. Technical Report M-74-5, Volume 2 14. OTHER REPORT HOSS (Any other numbers that may be seeled file report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	PUTER-CALCULATED GEOMETRIC CHARACTERISTICS OF MIDDLE-MISSISSIPPI RIVER DE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS. CARPTIVE NOTES (Type of report and inclusive dates) Lune 2 of 2 volumes HORRES (First name, alide inclusive dates) Lune 2 of 2 volumes To TOTAL M. OF PASSA None Total M. OF REFS None Technical Report M-74-5, Volume 2 DE OTHER REPORT NO(5) (Any other numbers that may be assigned this report) TOTAL M. OF REFS NONE Technical Report M-74-5, Volume 2 DE OTHER REPORT NO(5) (Any other numbers that may be assigned this report) TOTAL M. OF REFS None Technical Report M-74-5, Volume 2 DE OTHER REPORT NO(5) (Any other numbers that may be assigned this report) TOTAL M. OF REFS None Technical Report M-74-5, Volume 2 DE OTHER REPORT NO(5) (Any other numbers that may be assigned this report) TOTAL M. OF REFS None Technical Report M-74-5, Volume 2 DE OTHER REPORT NO(5) (Any other numbers that may be assigned this report) TOTAL M. OF REFS None TECHNICAL M. OF REFS			
DE CHANNELS; Volume II; SIDE-CHANNEL CONTOUR MAPS ICAIPTIVE NOTES (Type of report and inclusive doise) lume 2 of 2 volumes THORISI (First need, siddle initial, isel name) ctor E. LaGarde muel J. Winfrey 23 22 720 None Technical Report M-74-5, Volume 2 DD. CTHER REPORT HO(8) (Any other numbers that may be ossigned this report) STRIBUTION STATEMENT proved for public release; distribution unlimited. PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	DE CHANNELS: Volume II: SIDE-CHANNEL CONTOUR MAPS CRIPTIVE NOTES (Type of report and inclusive dotes) Lume 2 of 2 volumes GRORES (First name, middle initial, lost name) Stor E. LaGarde Ruel J. Winfrey Technical Report Mone 23 22 780 None Technical Report M-74-5, Volume 2 DECT NO. Technical Report M-74-5, Volume 2 DECT NO. Technical Report Mois (Any other numbers that may be assigned this report) TRIBUTION STATEMENT DISTORTED TECHNICAL TOTAL MA. OF PARSE (Type of The No. Of The PS None 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	CRIPTIVE NOTES (Type of report and inclusive dotes) Lume 2 of 2 volumes MORISI (First name, alddle initial, lost name) PLEATOR GRANY NO. Technical Report M-74-5, Volume 2 DOLCT NO. Technical Report M-	CRIPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes CRIPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes CRORES (First name, additionally issues) CRORES (First name, additionally issues) CRORES (First name, additionally issues) The control of th	ORT TITLE	and a graph of the state of the	The second secon
CRIPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (First name, alddis initial, last name) PLEAST A STATE NAME OF PARES 10. TOTAL MA OF PARES 10. No. of METS None 11. SPONSORING MILITARY ACTIVITY 12. SPONSORING MILITARY ACTIVITY 13. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT PLEMENTARY NOTES CARPTIVE HOTES (Type of report and inclusive dates) August 2 of 2 volumes (9 Technical report report and inclusive dates) (9 Technical report report and report and inclusive dates) (9 Technical report report and report and inclusive dates) (10 Total May of Page 1	CRIPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (First name, aldde Initial, lost name) POTON E. LaGarde HURLY OR GRANT NO. DIECT NO. Technical Report M-74-5, Volume 2 D. OTHER REPORT NO(5) (Any office numbers that may be ossigned this report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. To S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	CRIPTIVE NOTES (Type of report and inclusive dates) Lume 2 of 2 volumes HORISI (Piet name, middle initial, last name) Peter E. /LaGarde nuel J. Winfrey 10. TOTAL WO. OF PASS. 123 0 780 None 124 None 125 None 126 None 127 None 128 None 129 None 120 None 120 None 120 None 121 None 121 None 122 None 123 None 124 None 125 None 126 None 127 None 127 None 128 None 129 None 120 None 120 None 120 None 121 None 122 None 123 None 124 None 125 None 126 None 127 None 127 None 128 None 129 None 120 None 120 None 120 None 120 None 121 None 122 None 123 None 125 None 126 None 127 None 127 None 128 None 129 None 120 None	MPUTER-CALCULATED GEOMETRIC	CHARACTERISTICS OF MI	DDLE-MISSISSIPPI RIVER
Technical Report M-74-5, Volume 2 DO OTHER REPORT HO(8) (Any other numbers that may be assigned this report) The statement of the statement	TRIBUTION STATEMENT PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT PLEMENYARY NOTES LONG 2 Volumes (And 2 Volumes and 2 Volumes) (And 2 Volumes and 3 Volumes) (And 3 Volumes and 4 Volumes) (And 4 Volumes and 4 V	Lume 2 of 2 volumes HORIES (Pict cons., gliddo initio), Isol nome) Stor E. LaGarde muel J. Winfrey 75. No. of REFS None 123 12 7750 None 124 None Technical Report M-74-5, Volume 2 15. OTHER REPORT NO(8) (Any other numbers that may be confined report) PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	DE CHANNELS: Volume II: SII	DE-CHANNEL CONTOUR MAP	S. = =
THORISI (First name, middle initial, iset name) cotor E. LaGarde muel J. Winfrey 23 770 None 23 770 None None Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be ossigned this report) STRIBUTION STATEMENT proved for public release; distribution unlimited. PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT PLEMENYARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 D. OTHER REPORT NO(8) (Any other numbers that may be seeigned this report) Toroved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	TRIBUTION STATEMENT Droved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis, Office of Environmental Resources St. Louis, Missouri	CRIPTIVE NOTES (Type of report and inclue)	ive dates)	F-+ /
Technical Report M-74-5, Volume 2 DOTHER REPORT HOIS) (Any other numbers that may be excipted this report) To see the second of the second o	TRIBUTION STATEMENT PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT PLEMENYARY NOTES 12. FOR GRAPY NO. 12. TOTAL M. OF PARES 13. TOTAL M. OF PARES 14. No. of METS None 15. No. of METS None 16. No. of METS None 17. Technical Report M-74-5, Volume 2 18. OTHER REPORT NO. 19. OTHEREPORT NO. 19. OTHER REPORT NO. 19. OTHER REPORT NO. 19. OTHER	TRIBUTION STATEMENT PRIMERY OF PARTY NO. OJECT NO. Technical Report M-74-5, Volume 2 DO OTHER REPORT NO(8) (Any offer numbers that may be colleged this report) To spend the statement of th		(9)	lechnical rept
Technical Report M-74-5, Volume 2 Technical Report	TRIBUTION STATEMENT DIECT NO. TOTAL MODERN PROPERTY NO. 23 23 780 None 10. None 12. TOTAL MODERN NO. PLEMENTARY NO. Technical Report M-74-5, Volume 2 10. OTHER REPORT NO. TRIBUTION STATEMENT Droved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT DISCONDICT NO. TOTAL MOST PROPERTY NO. OF REFS. No. 07 MET. 23 23 720 None Technical Report M-74-5, Volume 2 DO. 07 MET. REPORT NO. (Any other numbers that may be ossigned this report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(S) (Any other numbers that may be confined report) Droved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	THORES (Pirat name, middle Initial, last name	•	The state of the s
Technical Report M-74-5, Volume 2 STRIBUTION STATEMENT Oproved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT DIECT NO. Technical Report M-74-5, Volume 2 D. OTHER REPORT NO(8) (Any other numbers that may be seed this report) Troved for public release; distribution unlimited. The sponsoning military activity U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 DO OTHER REPORT HO(8) (Any other numbers that may be seed and this report) Troved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(S) (Any offer numbers that may be code of this report) Droved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	ctor E. LaGarde		
Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be confined ship report) Proved for public release; distribution unlimited. PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TECHNICAL REPORT M-74-5- Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be assigned this report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. PLEMENYARY HOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be confined while report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. PPLEMENTARY HOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be code of this report) Droved for public release; distribution unlimited. Description of Environmental Resources St. Louis, Missouri	muel J. Winfrey		
Technical Report M-74-5, Volume 2 D. STHER REPORT HO(8) (Any other numbers that may be seeled this report) Deproved for public release; distribution unlimited. DEPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be seeled this report) PLEMENTARY HOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be assigned this report) Proved for public release; distribution unlimited. PLEMENTARY HOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be code of this report) Droved for public release; distribution unlimited. PPLEMENTARY HOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	PORTORTE	70. TOTAL MO	OF PAGES
Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be estimated after report) Deproved for public release; distribution unlimited. Deplementary hotes 12. Sponsoring military activity U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 D. OTHER REPORT NO(8) (Any other numbers that may be seeigned this report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(8) (Any other numbers that may be seeigned this report) TRIBUTION STATEMENT Droved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	Technical Report M-74-5, Volume 2 D. OTHER REPORT HO(S) (Any other numbers that may be coalgaed this report) Proved for public release; distribution unlimited. PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	in 1974)	23 // 2	None
DEPLEMENTARY NOTES Technical Report M-74-5, Volume 2 D. OTHER REPORT NOSS (Any other numbers that may be essigned this report) DEPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 Description STATEMENT Droved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 30. OTHER REPORT HO(8) (Any other numbers that may be essigned fills report) Proved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	Technical Report M-74-5, Volume 2 **DOTHER REPORT HOSS (Any offer numbers that may be accigned this report) **PPLEMENTARY NOTES** 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	ONTERCT OR GRANT NO.	W/NW/	5-40-M-74-5
DEPLEMENTARY NOTES Technical Report M-74-5, Volume 2 D. OTHER REPORT NOSS (Any other numbers that may be essigned this report) DEPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 Description STATEMENT Droved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	Technical Report M-74-5, Volume 2 30. OTHER REPORT HO(8) (Any other numbers that may be essigned fills report) Proved for public release; distribution unlimited. 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	Technical Report M-74-5, Volume 2 **DOTHER REPORT HOSS (Any offer numbers that may be accigned this report) **PPLEMENTARY NOTES** 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	BOJECT NO	14 IVI	- 1N-11 11 9
Deproved for public release; distribution unlimited. Deprementant notes 12. Sponsoring Military Activity U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT proved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT proved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	proved for public release; distribution unlimited. PPLEMENYARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri			
proved for public release; distribution unlimited. PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT proved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	TRIBUTION STATEMENT proved for public release; distribution unlimited. PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	proved for public release; distribution unlimited. PPLEMENYARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri			
PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources	PLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri	PPLEMENTARY NOTES 12. SPONSORING MILITARY ACTIVITY U. S. Army Engineer District, St. Louis Office of Environmental Resources St. Louis, Missouri		SP. OTHER RE	PORT HO(8) (Any other numbers that may be seel
	St. Louis, Missouri					
				proved for public release; d	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; o	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; o	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; o	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; d	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; o	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; o	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; d	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				oproved for public release; d	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				oproved for public release; o	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				oproved for public release; o	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; d	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources
				proved for public release; o	distribution unlimited 12. SFONSOR U. S. Office	. NG MILITARY ACTIVITY Army Engineer District, St. Lo of Environmental Resources

DD POR 1473 REPLACES DO PORM 1475, 1 JAM 64, WHICH I

Unclassified Security Classification



٠.	Classification	LINK A		LINK B		LINK C	
	KEY WORDS	ROLE		ROLE	WT	ROLE	
		100 miles - 100 miles					
					1,445		
						10000	
					TO BE		177,19
						1	
						1	
						1	
							1
		and the second					
							-
							1818
					10000		
			j - L				
			1				

Security Classification